

Educational Supplement

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Spirited defence

Sir Fred has done his shining armour and come to the rescue of the Schools' Council, that poor maiden already loaded to the brim with criticism and slinging words from the House of Commons Select Committee on Expenditure.

At the meeting of the governing council last week the NUT's general secretary besought the council to use their acceptance of a committee report on curriculum research and development as the occasion for strong rebuttal of the "irresponsible criticism" to which the council has recently been subjected.

The finest example of the professor "who seems to be the universal pundit" (John Valzey) describing the council as "an expensive and irrelevant Lancashire" and the editor "whose paper deals with the Schools' Council largely at the level of a *Daily Mail* gossip column" (Aristides). Said editor had given evidence to the committee that "the Schools' Council has fallen under the influence of the teaching profession who are using it for trade union purposes with the result that it has forfeited all respect".

"Doesn't he know the constitution?" Max Morris asked afterwards. "It's laid down that it is under the domination of the teaching profession." Yes, the editor pleads, guilty up to a point. But there is a difference between teacher monopoly and trade union stranglehold.

But I digress. The noble champion was not done yet. There was still the I.E.A. association spokesman (Mrs Coker) who slammed up the Schools' Council as "spending a lot of time on examinations, that everybody passes".

"I would submit that these criticisms coming from people who should know better are utterly irresponsible. Of course the council does make mistakes but it has also made very considerable progress and it is also dealing bravely with very complex issues, especially in the field of examinations."

There are plenty of people outside who see the council as a promising source of finance for their own ideas. This paper is one piece of evidence of the way in which we deal with these things.

The select committee will hear the unexpurgated version when Mr



"They didn't leave out the 's'!"

Jarvis appears before them on January 26.

Meanwhile the council carries on, hidden away to find itself somewhere other than the Methodist Missionary Society for its governing council meetings. The academics have led those who sit at the back to complaining whether they still have practices after so long a spell out of education. The teachers continue to draw their salaries, as does headmaster George Carter, who looks in at Leamington School in North Kensington each day before taking his seat by Robin Auld's side.

All very well for some

Tomlinson goes on and on. We are about to start a thirteenth week with major battles still to come.

The lawyers at least have their fees, even if some of them are now drawing whether they still have practices after so long a spell out of education. The teachers continue to draw their salaries, as does headmaster George Carter, who looks in at Leamington School in North Kensington each day before taking his seat by Robin Auld's side.

Dora Loftus, the other I.E.A. representative, is not so fortunate. All she gets is her lunch money and travelling costs. Last week Mrs Loftus's growing exasperation erupted. She declared suddenly that she was tired of lawyers who went on asking questions to which everyone already knew the answers. She wanted them to get on with the job so that she could look forward to having a private life again sometime.

Mr Auld told everyone to take a five-minute break, and went off with Mrs Loftus. When the inquiry re-assembled, he delivered a cutting little homily on the basics of cross-examination. Not a happy moment for the 135-day advocates, and particularly embarrassing for Forest Moorhouse, the managers' counsel, who happened to be asking the questions when Mrs Loftus's patience ran out.

By chance, it is mainly women

who have incurred Mr Auld's displeasure so far. His most persistent and adulatory interrogator has been addressed to some women managers, and by contrast, his questioning of Terry Ellis and Brian Haddow, the first two teacher witnesses, has appeared to use the most over-the-top of that evening.

Let's hope the preaching will lead to the practising—meanwhile there'll always be good old Patricia Hughes and the BBC's Monday lunchtime concert. From St John's.

Aristides



The printed word means different things to different people. We each of us colour it from our own mental stock. Thus I never myself see mention of the Bishop of Kingston (Hugh Montefiore to the layperson) but what I think at once also of Mr W. A. Barker, sometime headmaster of the Leys School, Cambridge, and now at University College School, London. For when that cleric once tried to play down the violence of some students at Cambridge by suggesting in a sermon that Cambridge was lucky not to have soldiers quartered upon it, our headmaster sought to divert the ensuing storm in the Times into a discussion on the dangers of misrepresentation—quite improperly, I felt at the time, since there was no question of Dr Montefiore being misrepresented.

Slacking?

St John's Smith Square, its east end just made for recitals and its crypt just made for canopies and champagne, was recently filled with musicians, journalists, publishers, and dilettantes celebrating the inauguration of a series of musical handbooks. The first two—on the violin and the piano—were written by Yehudi Menuhin and Louis Kentner, and the promoters thought it a good idea to have their practice what they preached before the wine started flowing.

Frank's Sonata in A major is a wonderful propaganda piece for both instruments—but much more, it is passionate, tense, melancholy, and thoughtful, electrifying. A pity then, that this time all questions seemed to have been spent beforehand—and all the fuss blown.

The recital was, admittedly, relegated to a small part of the evening which was really only an advertising session, but it's strange that any musicians (especially those under the "morality" of music making) should give such an over-mellow and resigned performance.

In the recent fuss over the bishop's remarks about the Concorde, I quite expected to see Mr Barker appearing again. I did not but by the oddest coincidence Kenneth Rose, that arch gossip of *The Sunday Telegraph*, reported that Mrs Barker, who, it seems, is a member of the Airline Users' Committee has been criticizing the Concorde's lavatory. Her remarks, I hasten to add, concerned some sharp puns under the lavatory seat. They had nothing to do with the Concorde made when its toilet was flushed.

I still find the juxtaposition of the names quite fascinating. And if it was Mrs Barker rather than her husband who came into the limelight this time that seems entirely proper when we have been so much concerned with the Sex Discrimination Act and International Women's Year.

Our attitude to such matters must certainly have coloured our individual reactions to the now

long-ha about corporal punishment for girls. But however different we each read the announcement of that Newcastle headmaster that girls who misbehaved would be punished in the same way as the boys, the newspapers themselves were very different in the way they reported the matter.

In *The Times* we had a complete report that devoted much space to Mr Mulley's speech at Lancaster at the North of England Education Conference. The report included his very comment afterwards that the Newcastle announcement seemed to have got far more coverage in some newspapers than in the *Deliberations at Lancaster*. But it was careful in what he said about Newcastle. "I am against any use of violent form of punishment," *The Times* reported him. "We do not have a policy as a department except that we are against any excessive use of corporal punishment." He had added that it is powers to intervene were limited.

Mr Mulley came out of it rather differently in the *Daily Mail*. "I do not know all the details," the newspaper reported him as saying, "but it does seem to me that the headmaster has taken leave of his senses."

Mr Mulley and the headmaster were kept apart in *The Daily Telegraph* which printed separate reports for Lancaster and Newcastle. There were separate reports too in *The Guardian*, though the paper did carry a footnote to its Newcastle story. "Mr Mulley, Secretary for Education," it reported, "was obviously surprised yesterday to find that the leather tawse was in use in any English school, and that it was used in a regular manner. It is often used."

In the *Daily Express* there was yet another account. Mr Mulley was held to hold vital talks with teachers and leaders over violent behaviour in schools. He saw biological differences between the sexes but it was his job to make judgments about the action taken by headmasters' local authorities.

(Incidentally, I liked the way in which Mr Robert Cook, general secretary of the National Association of Head Teachers, stated in a bold fact was recorded in the subject from Robert Kee on independent television. Why do broadcasters always imply that it is only they could spare the time to run our affairs so much better themselves?)

You pay your money and you get your choice. But no two papers ever the same. You will also find different reports. Mr E. Richardson, the outgoing American ambassador, recently visited the North Comprehensive School, a bold fact was recorded in the subject from Robert Kee on independent television. Why do broadcasters always imply that it is only they could spare the time to run our affairs so much better themselves?)

Next week



The Bullock report on reading and language is one year old. Has it been a success or failure? Has anyone taken any notice? What next?

Next week, we publish the first in a three-part series on Bullock. Beginning with a special TES survey into how local authorities have followed up the recommendations.

Plus, articles by two committee members, Diana Hutchcroft and Michael Marland, on the report's impact on schools.

Price rise

The price of *The Times Educational Supplement* will go up next week from 10p to 12p.

Mixed views on mixed ability

I.E.A. report says some schools operating mixed ability are oversubscribed, but others claim that parents prefer them because they have stuck to streaming.

Ministerial merry-go-round

Stephen Cohen interviews Mr Gerry Fowler, the new minister in charge of higher education. Mr Fowler has just given up his responsibility for devolution to stop jobs with Lord Crowther-Hunt for the second time.

Critics from within

The Tyndale inquiry hears evidence from the three teachers who were critical of the way the head, Mr Terry Ellis, ran the junior school; the deputy head, the infant school head and the dissident former part-timer. Mark Jackson reports page 4.

Foreign, pages 14-15
United States: Congress to oppose President Ford's budget cuts. West Germany: new impulse over vocational training legislation. Letters, pages 16, 17
Quality or cost: cutback by books; forgotten role: the slowest; mathematics' standards; general council plan. Features, page 19
Douglas Barnes on patterns of classroom communication; Leslie Barua

No excuse for drudgery

Basic skills are essential, says a Schools' Council report on the middle school curriculum, but it is up to teachers to make them interesting, or even fun. Bob Dye reports page 5.

The Secret Service?

The National Union of Teachers have accused the DES of cloaking their procedures in secrecy. page 3

The 'cult' in culture

Michael Clarke looks at an analysis of art's social role. page 22

TES Extra: Children's Books

pages 41-48

Common ground

Mr Fred Mulley and Mr Anthony Crosland were in agreement at the Labour Party local government conference in Cardiff on the need to spend I.e.n. money wisely. pages 8, 9

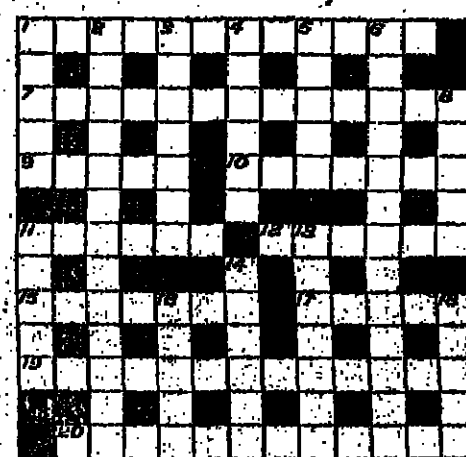


Artis reviews, pages 86-87
Araminta Woodsworth and Christopher Griffin-Boule on cinema, records, opera; Nigel Crowther and Brian Hill on radio-vision programmes; ETV film reviews and briefings.

Talkback, page 31
Richard Nicholson on the labeling of teachers; Judy Bradley and Christine Meredith on subject specialisation; Lav Frickman on a Russian view of Robin Hood.

Classified ad index

Crossword No 1,017



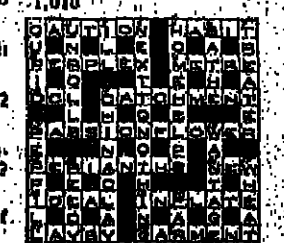
ACROSS

- Crazy like a top salesman (3, 2, 1, 6).
- They are not down under but over (7).
- The act of abandoning indifference (5).
- Adaptation dance for Newman (7).
- A sticker, even when on the rocks (6).

Down

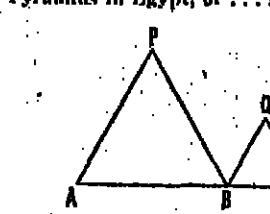
- It's the false, it's self (11 letters).
- Now legally outlawed regarding colour and sex (13).
- American rocks on the roof (7).
- Smells a good looking way in which to go (6).
- Over division (7).
- Ample square basing (7, 8, 9).
- The seven clams (5).
- Pity to make a possible scale (6).
- It is said to have been a nice one (7).
- The old one could have been a coach (6).
- Something snuffly at the joints (5).
- It's not to be my wife as the fork is to the knife (13).

11 British ingredients that makes for a stew (6).



Maths

Pyramids in Egypt, or ... ?



The diagram could be interpreted as a view of two overlapping pyramids, one with twice the linear dimensions of the other. A line through the middle of each pyramid, parallel to the base, divides each into two equal parts. The line through the middle of the larger pyramid is twice as long as the line through the middle of the smaller pyramid. In terms of pure geometry, however, it shows the relationship between the areas of the two pyramids. The area of the larger pyramid is four times the area of the smaller pyramid. The area of the larger pyramid is four times the area of the smaller pyramid. The area of the larger pyramid is four times the area of the smaller pyramid.

The angles of triangles

- Prove that AP and DQ are perpendicular to PQ.
- If the length of each side of PAB is 2x units, and PQ is produced to meet AC produced at Z, calculate the lengths of AZ, PQ and PZ.
- What would be the length of the sides of another equilateral triangle, with one vertex at C, another on CZ, and the third on QZ?
- How many more similar triangles (each half the size of the preceding one) could be fitted in with they reached the point Z?
- Find the angles of the triangles ABC, PAB, PQC, and PZQ.
- If the ratio of the angles is 5:6:7, show that the angles of the corresponding interior angles are 4:3:2.

Industry in trouble: who is to blame?

It is tempting to dismiss the vociferous and often vague accusations of industrialists about low academic standards and anti-commercial motivation as simply an attempt to make education the scapegoat for the shortcomings of industry. In times of economic gloom it is always convenient to appoint public scapegoats and to forget the received wisdom of a few years earlier.

Where now is all the talk of education for leisure, education as a pleasure and a right, something which opens doors in the mind as well as in the labour exchange? Now it is all "wealth generating" and how to convert seven-eighths into decimals. The anguished cries about how to improve mathematics and sciences in teaching have in some quarters been replaced by bitter accusations that now they lurk in schools instead of getting on with saving the nation's bread.

It is tempting to dismiss the vociferous and often vague accusations of industrialists about low academic standards and anti-commercial motivation as simply an attempt to make education the scapegoat for the shortcomings of industry. In times of economic gloom it is always convenient to appoint public scapegoats and to forget the received wisdom of a few years earlier.



pupils at all levels, and there are some welcome experiments in applied mathematics for the less able which aim to stop arithmetical skills from atrophying during the last few years at school. And CRAC, the Civil Service, among those who have been at work for years on improving career advice.

It would, therefore, be absurd to let the accusations of employers panic schools into dumping large parts of the curriculum designed to open to children opportunities which they will never get again. It is a chance to read Homer or the chance to work a tape in the

on a local school/factory basis but also at the higher levels, through sixth-form programmes, university scholarships, courses for careers teachers and the A level business studies course. If not everyone subscribes to the view that young people are being actively discouraged from entering industry and commerce, most agree that they are being put off by default—by lack of information.

But there is also a more serious structural handicap quite outside the scope of education with which industrialists and government have to grapple—one which Mr Bernard Holloway of Manchester University appointments board drew attention to (this week, page 7). The rewards for graduates in the non-productive sectors, in particular the Civil Service and local government, are greater than those offered by "wealth generating" industries, not just in terms of salaries but for job security, index-linked pensions, and some guarantees against being moved around at short notice. The private enterprise sector is prevented both by profit levels and by government pay and prices policy from acting in true entrepreneurial manner and improving the attractiveness of jobs. In such circumstances, you do not have to be a wicked anti-capitalist to advise young people against jobs in industry.

No comment

In *The Times*, the guidelines for next year's exam are already contained in spending some millions which we don't want to go to and in order to be able to pay we shall have to reduce the expenditure from *The Weekender*, December, 1975.

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12/1



The background to the report is the "learning to learn" tradition of the best primary education of the past 20 years. The context is the years 1 to 16, when the questions of what and how children should learn are most important. The report is a response to the challenge of preparing children to use their resources of skills, time and money. If the Schools Council were to consider a new curriculum project, it could do worse than summon a new working party to apply the Ross model to the 15 to 16 sector.

The GLC submitted to the Land Field Committee on local government

(This is not to say that, in the past, industrial growth in the region, or in the development areas, has been achieved

ill-timed and irrelevant. It shows even less understanding of the predicament in which the old people find themselves.

The association will not name the chief auditor, but he alleges that money is being taken from the Name schools for teachers who are doing general teaching. They quote as typical the example of a chief auditor for primary schools who sold a team of oxen for 50 per cent of their time to negligent children.

A spokesman for the school said there was "a fairly high wind" on the evening of January 10, and the roof structure allowed the flames to "rapidly sweep through the roof cavities."

Longman

A poor view of industry?

As the chorus of complaints about the flow of able young people into industry and commerce swells, pressure is being brought to bear on the education service to put

matters right.

At the recent North of England conference, Mr Mulley added his voice to those who want schools to use their influence to persuade

young people to consider jobs in "wealth generating industries and commerce". Last week in the *TES*, Sir Arnold Weinstock, managing director of GEC, blamed

teachers for producing both academic standards and attitudes hostile to industry and commerce. Here, school heads and industrialists put their views

Heads: society gets what it deserves

D. N. Underwood, Sydney Smith High School, Hull

It was difficult, he said, to persuade sixth-formers to consider industry—only about half a dozen out of 80-90 were thinking of going into engineering.

"Half the problem is with parents. In the 1950s, parents saw prospects in industry. But now they are reluctant to send their bright children into industry because they believe it is in turmoil."

But the fault was also with industry for not selling itself. Hawker Siddeley, a local employer, had shown what could be done. They took an active interest in what went on in schools and offered attractive wages, prospects and security. Able young leavers were keen to work there.

His English staff felt standards among 16-year-olds were as high as ever; firms were simply taking on lower level pupils than in the past.

On mathematics he said: "If firms need that sort of mathematics—long division, for example—they should run conversion courses themselves."

His school runs linked courses and work experience, mainly for the less able.

Peter Mason, Manchester Grammar School

"I have a good deal of sympathy for what Sir Arnold says. There is something in the air which suggests that industry and commerce do not offer the same opportunities for personal development."

A fair proportion of very able MGS boys went into industry—mainly through the professions rather than as direct management recruits. "You cannot live in Manchester or the north-west without being aware of industry. But this can work both ways." Closer knowledge could turn boys against industry as well as attract them into it.

In the third year sixth, boys are seconded for three days a week to local Manchester firms. But the danger in a school of this kind, Mr Mason said, was that too many pupils choose too academic a career.

The lure of research. John Davies, Llanidloes, Powys

"By and large the community which feeds a school tends to get the service and standards they seek from that school. In most instances, the community chooses to pride itself on the high academic achievement of the school. Communication tends to attach less importance to

technical education. This was not the fault of the school, but the image created by industry at large.

"It is wrong of Sir Arnold Weinstock to accuse teachers of a bias and to blame them for the defects of industry. Industry must like all other forms of employment, attract those they need and offer forms of encouragement especially that of job satisfaction to those they wish to recruit."

Mr W. P. Lansdell, Brentwood County High, Essex

A girls selective school until recently—and so far has had no boy leavers.

"We certainly have not turned pupils away from industry. There are however several men teaching in the school who were in industry and were rather disenchanted with it."

"The image of industry has not been a good one. Some of the girls are pretty disenchanted. What they see on television does not really recommend it to them. Many of them are socially conscious and worried about pollution."

A. L. Morgan, De Aston School, Market Rasen, Lincolnshire

This is a rural school, and the majority of leavers go into agriculture. Only a small number living near Lincoln go into industry.

"Sir Arnold is just not on the ball", Mr Morgan said. Prejudices did not start in school. It was the general attitude of society to industry.

"We do say to our sixth-formers, 'For God's sake keep industry and commerce open as a career choice, or who the devil will be earning the money in the next generation?'"

"Tell Sir Arnold to get some investment in small towns in mid-Lincolnshire."

R. Yates, Ossett School, Wakefield

Because there is a lot of light industry in the town, most leavers at 16 go into industry—110 out of 135 who went into employment last year. Of those, about 70 went on apprenticeships or training schemes.

Mr Yates thought leavers' standards were not always good enough (though not in his school). "I am very sympathetic with Sir Arnold's article. We do our best to make sure our young leavers are not at that sort of disadvantage."

Eighty of this year's leavers (mainly the future apprentices) are doing a CSE course on "applicable arithmetic" to prepare them for industry. About a third of fifth-formers do linked courses, and 50 out of 140 girls in the fifth form do secretarial or office studies.

Michael McCrum, Eton College

"We go out of our way to encourage boys to think of jobs as a possible career. There is clearly a need for better man-management relations and I would think our boys had a hand in that."

The Industrial Society has one-day conferences at the "every other year" which is an sorry for all A level pupils. Oxbridge entrance, nearly all go on industrial attachment to like BP, IBM, Marks and Spencer, British Rail, Ferranti for three weeks. "On the last occasion, of the boys enjoyed it very much."

C. Davis, Devises School, Shire

"It is likely that pupils are influenced by what is available in their area and by their prospects. When pupils hear threats to close firms like I. Royce and the poor performance of British industry, they are affected."

He said Sir Arnold's complaint about the poor quality of 16-year leavers harked back to the time when many more left at that age. The bright pupils stay on to the sixth form and higher education.

High pay in public sector lures graduates away from industry

The economy is threatened by public employees who attract graduates with inflated salaries, says the annual report of Manchester University appointments board.

The report, published on Tuesday, says that those entering public employment, other than university teaching, are offered greater, and sometimes much greater, salaries than those going into private industry. This has alarming implications for the future of the nation.

In the past salaries in the Civil Service, nationalized industries and local authorities were based on comparable salaries in industry. This ignored the fact that the private sector does not have the security of the public sector.

"If the mixed economy is to survive, then the situation where graduates in public employment are paid more, often over a substantial number of years, than those who enter the major wealth-creating sectors, can only be allowed to be a very temporary one."

The Post Office, local authorities and the National Health Service come in for special criticism.

In 1974 starting salaries in the Post Office were substantially higher than was necessary to attract enough graduate recruits. The reorganization of local government also produced a flurry of new jobs, some of them at inflated salaries.

The report attacks claims that polytechnics turn out more people who want to work in industry than do universities. Figures for university graduates were good, those for polytechnic students were poor. The figures collected for polytechnic graduates in 1974 suggested no difference between polytechnics and universities in the kind of jobs their students entered.

"It is remarkable that the Department of Education and Science, from which ideas about manpower planning have recently been coming, should not have thought it necessary to insist on such a manpower audit, but should have been content with a situation where only some two-thirds of polytechnics on their own initiative attempt to collect such figures."

Fewer black births—census

The number of black children in primary schools will start falling in the next five years, according to latest figures from the Office of Population Censuses and Surveys.

The figures show that the number of children born to mothers from the New Commonwealth and Pakistan since 1969 has been falling steadily. But because the total birth-rate has been falling even faster, the proportion of black children in school may rise.

This rise is only significant in Leicester. Between 1969 and 1974, the number of births to black mothers rose from 912 to 1,014—or from 18 per cent of the city's births to 26 per cent. In all other white cities, the black birth-rate has gone down and the change in the balance between black and white has been negligible.

But the figures do not give a wholly accurate picture of the intake of schools. They include children of white mothers, who were born in India, for example, when their parents were there in the Civil Service or armed forces. They do not include children born abroad who arrive as immigrants subsequently.

In three areas of England and Wales, more than a third of the births last year were to New Commonwealth mothers. They were the London boroughs of Brent, Ealing and Haringey.

Behaviour poser for parents of subnormal

Parents, teachers and nurses can reinforce the behavioural difficulties of mentally subnormal children, a conference organized by the Institute of Mental Subnormality was told last week. The conference was called to discuss the ethical implications of behaviour modification, particularly in cases of mental subnormality.

This was one of the major ethical questions facing behaviour modification therapies, said Mr John Hattersley, a psychologist at Lea Hospital, Bromsgrove, and a tutor at the institute.

"A behavioural approach to these children's problems focuses on their environment, a large part of which is made up of other people—teachers, parents and nurses. If this environment is teaching and maintaining the problems, we have to ask if it is right to say to the parents, for example, 'It is not the child we need to change, but you'."

He warned the conference of the dangers of attempting to change parents' behaviour. "If the right approach is not taken, we run the risk of changing confident parents who felt they were coping well with their mentally handicapped child, into guilty, non-coping parents."

Mr Hattersley went on to outline

other ethical problems behind behaviour modification therapy. Using reinforcers, a reward system, to condone satisfactory or improved behaviour patterns had obvious pitfalls if rewards, such as sweets, pulling in teeth decay or obesity in later life were used.

There was also the difficulty that a reinforcer must be used consistently throughout the child's environment if it were to prove successful. For example, a reinforcer to teach language skills might obtain positive results. But what happened at home or school when the child did not get the reward of sweets he had come to expect? At Lea Hospital Mr Hattersley said they tried to use less harmful reinforcers, such as social praise.

Behaviour modification therapists must recognize that their behaviour was as open to modification as that of their patients. While most therapists probably found it more rewarding to go into the home and treat mentally handicapped people individually, in the time spent travelling and giving treatment they could have been working with 20 to 40 patients on a hospital ward. This question of time and economic factors and how best to use them was really an ethical question.

How leavers see work

Miss Joan Lester, Under-Secretary of State at the DES, told the House of Commons this week that aspects of school pupils' attitudes to "the world of work" had been examined in recent years by the Office of Population Censuses and Surveys.

The surveys, which were published by HMSO, included: *Young school leavers—an inquiry carried out for the Schools Council, 1968; Looking forward to work—an inquiry on behalf of the Central Youth Employment Executive, 1974; Fifth-form girls: their hopes for the future—a survey on behalf of the DES, 1975.*

A pilot survey of the attitudes of young people to school, work and higher education was also carried out for the department by OPCS in collaboration with Professor Gareth Williams. Publication of a preliminary report was under consideration.

Current research into the construction and use in schools of job knowledge indices by Mr M. J. Kirton, of Hatfield Polytechnic, was grant-aided by the DES and the Department of Employment. The question of publication would be considered when the final report was received.

Some relevant information was also expected to become available from the third sweep—at age 16—of the National Child Development Study, which was funded partly by the DES.

The Schools Council careers education project material would be published when ready. The council received half its funds from the DES.

And teacher goes too...

Teachers from three Inner London primary schools will move up to their local secondary school with their 11-year-old pupils next September in an experiment to try and ease the transfer between schools. At the end of the year the teachers will move back to their schools and be replaced by another set moving up with their pupils.

It is hoped the scheme, which will take place in Barking, will help children with educational, social or emotional difficulties, and will keep up some continuity. In the secondary school the teachers will take their old pupils for about half the time, with the other half being devoted to specialist teaching of science, physical education, dance, drama and craft.



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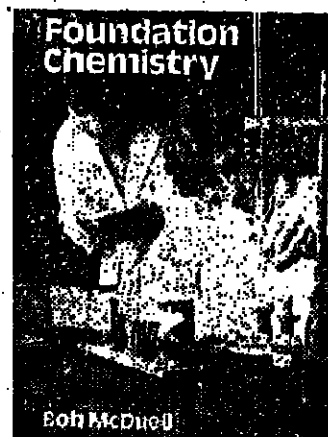
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"With regret I have to say that I agree in large measure with Sir Arnold. But I would like to carry it a bit further in that I feel that some of our important universities, in giving advice to undergraduates, think of industry and commerce last of the Civil Service, the diplomatic service, the professions. . . . I sat many years ago on the Cambridge University appointments board and I'm afraid not much has changed since then."

"Industry and commerce's image is poor, and, despite their contacts with appointments boards, I get the impression that the boards do not understand their needs."

"With schools, on the whole, we have a good relationship. We give them a great deal of help. We don't employ 16-year-olds, or very rarely. However, I was told recently by two very experienced staff managers that 16-year-olds applying are less well equipped academically than 15-year-olds were five years ago."

Unilever: Tony Vincell, national personnel manager

"The areas where we do get concerned are about basic literacy and numeracy, especially in 16-year-olds. In vocational areas, things are getting worse. Many school leavers seem to have difficulties with the basic skills that they used to, and though it has not reached the disaster point yet, we would be most concerned if it went on getting more difficult."

"That is why we look it as a voluntary sign when the Education Minister used a recent occasion to encourage emphasis on the Three Rs."

Unilever run a highly organized exercise with universities, polytechnics and technical colleges for recruiting higher levels. "We spend a lot of time and money and we try not to be selling industry but to be giving information." They have recently started running three-day courses for careers teachers.

"There is an awful lack of information about the industry is like, but very few teachers may be very way out, but we are con-

cerned with the very large number who would like to know more."

Ford Motor Company: Ron Shepherd, manager of education, training and personnel services.

Ford recruit 16-year-olds mainly to technical jobs. For 30 years, they have been putting them through sophisticated selection tests.

"I have to admit that in that time we have been able to measure a noticeable drop. This may be because we are attracting a different population than 15 years ago. Now most of the more able are staying on to do A level and we are perhaps getting near the bottom of the barrel. I really would not know if there has been an absolute drop in standards but certainly some of the kids coming out of school are not competent in the basic mathematical skills."

Ford find that they do not have much difficulty in converting school leavers' maths into the sort of maths they need in about two or three months. "But I do think that the extra year at school has not been used as effectively as it might."

Lord Ryder, chairman National Enterprise Board

In a recent interview with the *TES*, Lord Ryder said he would like to see business schools providing courses for careers masters.

He came back repeatedly to the question of the school leaver who says, "I want to be the chairman of ICI, how do I start?" At the moment, nobody could tell him and even if they could, most teachers would probably prefer not to.

All careers pamphlets were angled towards the professions and the examinations which had to be passed in order to qualify. Manufacturing industry was ignored with the result that the best talent in the country was not directed into line management.

What is line management? "A manager", Lord Ryder said, "however low, who has got to manage people and any form of a production line or a sales line—any post where decision-making comes into it." Careers masters had got to be imbued with the idea that "there is nothing more exciting or can give greater satisfaction than line management."



SPECIAL ANNOUNCEMENTS

Members and Fellows of the College of Craft Education

The results of the election of the Council for 1976-77 will be announced at the College on Monday April 14, 1976. Northampton and Balliol forms are available from the Registrar, 36, Park Road, Hemel Hempstead, Herts HP1 1BB

TES

COURSES

New Themes for Education 5th to 9th April 1976

The first on an annual series of conferences to be held at Dartington Hall, which will bring together contributors from the 'growing edge' of the Arts, Sciences, Humanities and Education. Topics include the nature of educational progress and new themes from psychology, social psychology, science, art, philosophy and educational theory.

Taking part: Maurice Ash, Mark Brahm, Sir Alec Clegg, Peter Fenwick, Leo Fernig, Gabriel Fragnière, Maurice Goldsmith, James Henderson, Robin Hodgkin, Liam Hudson, R.D. Laing, Alwin Lishman, Spencer Milham, Frank Musgrove, Henry Nathan, John & Elizabeth Newson, John Shotton and Barbara Tizard.

Write for full details to: The Secretary, The Dartington Society, Dartington Hall, Totnes, Devon TQ9 6BJ. Tel. Totnes 862224 Ext 45

BRITISH CHILDREN'S THEATRE ASSOCIATION

COURSE IN CHILDREN'S THEATRE

THEATRE - IN - EDUCATION

20th-24th April, 1976

Northern Counties College of Education,
Newcastle upon Tyne

"The Nature of Drama"

Mr Gavin Wilson—Durham University

"Street Theatre"

Mr Tom Spencer—Forum Theatre Billingham

"Please Sir... Do you get paid for this?"

Miss Jane Mitchell—Greenwich Young People's Theatre

At the annual course the B.C.T.A. aims at providing a forum where ideas may be explored and experienced under a practical emphasis. It is unique in Britain in that it provides the only occasion when people actively interested in Children's Theatre and Theatre in Education, whether professional or amateur can meet together. Not only does it assemble talent and experience in the theatre, but also in the related fields of education, drama, and the arts in general, but also in the related fields of education, drama, and the arts in general.

Further details and booking forms available from:
Course Organiser, B.C.T.A., Hall Moor, Donham Green, Wymondham, Norfolk.
Tel. Wymondham 880.

Diploma in Education

with Special Reference to

Environmental Studies

This one-year full-time In-Service Course is designed to provide knowledge and understanding of the environment and the processes affecting it. The implications of these concepts in the education of children of the 9-13 years range, will be studied. Field work in a variety of environments will play an important part in the course.

Details and forms from The Academic Registrar,
Brentwood College of Education, Sawyer's Hall Lane,
Brentwood, Essex.

Places are available for 1978 but applications should be made immediately.

Chelmer Institute of Higher Education

BRENTWOOD COLLEGE

UNIVERSITY OF NOTTINGHAM

SCHOOL OF EDUCATION

Post-experience B.Ed. for serving teachers

It is hoped that, commencing in October, 1976, the University of Nottingham School of Education will begin a one-year full-time course leading to the degree of Bachelor of Education. This is intended for qualified, experienced serving teachers. For further details write to: The Administrative Assistant, Further Professional Training Division, School of Education, University of Nottingham, Nottingham, NG7 2RD.



Indian folk dancing performed by girls from different Commonwealth countries in Floriana, Malta, is one of the events in a film, *Folk Invasion*, made by Mario Azzopardi, a young Maltese film director. It was launched last week at the Commonwealth Institute.

The film records what happened last Easter when 59 young writers, dancers, musicians, actors and

artists from 15 Commonwealth countries spent two weeks learning about each other's culture at seminars and workshops at the International Arts Centre, Floriana.

Parents differ on day care

by Frances Stadlen

Many parents are unable to get pre-school day care for their children—and when they can it is often not the kind they want, according to a survey carried out by the Office of Population Censuses and Surveys.

The gap between demand and availability is greatest at the age of two, says the survey, which was presented to the private conference on day care organized jointly by the Department of Education and Science and the Department of Health and Social Security at Sunningdale earlier this month.

The conference papers have been made public after last week's report of the proceedings in the TES.

The survey was based on a random sample of children under five living in private households in 1974. One in five of the mothers were not happy with their childminders. Many of them would have preferred some kind of education for their children.

Nearly half of those who could not get day care said they would be prepared to help. But most of the mothers who used it saw it as a welcome relief from having to look after the children themselves.

In the foreword to the conference papers, Dr David Owen, Minister of State for Health, said the conference was about how to provide enough cheap day care to fill the gap between demand and availability. "We did not meet to discuss the desirable, we want to grapple with the attainable".

Many of those who attended believed that day care and education for the under fives could best be improved by following the best examples among the cheap, ad hoc, arrangements of local authorities. These relied on a mixture of public private and voluntary services.

There was no point in looking for tidy administrative solutions, he said. All forms of care had a place. The issue was how best to support voluntary bodies.

Dr Owen emphasized the importance of health, and called for "a policy which recognizes that the first nine months prior to birth are as important as the next five years".

A background paper prepared by the DES which stated that the aim of nursery education was to educate, and that this aim was "clearly distinct from the aims underlying the provision of care", provoked some disagreement at the conference.

Mr Christopher Price, Parliamentary Private Secretary to the Education Secretary, publicly dissociated himself from this section of the paper, insisting that "the aims of the carers and educators are not all that different".

The DES paper, however, confirmed that, jointly with the DHSS, the department have commissioned research to study and evaluate seven experimental nursery centres set up under the Urban Programme. The centres offer both nursery education and full-time day care.

and are the shared responsibility of the education and social services departments. Their staff include many teachers, headmistresses, a matron, and nursery nurses.

The DES paper predicted that further research would be done to assess the benefits and costs of local education authorities should curricula for staff, parents re-examine the way they ran children of coordinating curricula for their 16 to 19 age groups and education.

Mr John Raa Price, director of small groups of students in the Borough of Ilkington, told the group of education was difficult, and ference that a joint HEA/DES conference should consider 16 to 19 on its own, appointment of a pre-school officer to coordinate what the whole period 14 to 19. The services and planning—such as the vertical supply policies in such such post in the HEA—had a need for modern languages other possibilities of cooperation between French.

The real impact of rationalization needs to be borne upon the fourth and fifth years of the second paper, *A Policy for Young Children*, which stated the case against full-time day care, where options can so easily make not only individual but also organizational nonsense.

However, it was thought of as an "independent entity" an authority's 16 to 19 policy was a conference that while he was master of continuity and partly "anti-Pringle" he should not be remedial in the sense that it made that she is the custodian of a good earlier omissions from a timely dangerous and often weapon.

The fight to restore parents' silence was "rather separate" to that to persuade a bunch of educationists and administrators, but hardly remember the day when their children were young, to the coherent policy on the five.

Green light for drivers

Clarification was given in the Commons last week about who is allowed to drive school buses. This followed a question from Mr Alan Beith, Liberal MP for Berwick upon Tweed, who said school minibuses owned by parent-teacher associations had been withdrawn from service in some areas because of uncertainty about whether it was legal for them to be driven without a PSV licence.

Mr Kenneth Marks, Under Secretary of State in the Department of Environment, said in a written reply, "I understand that much of this has arisen because of inaccurate advice issued in a county circular. This wrongly attributed to the Traffic Commissioners for one of the traffic areas the view that even with no payment was made by passengers towards transport costs, payments for such things as admission charges and the cost of meals during an outing would bring such a journey within the scope of PSV licensing."

He informed that the Traffic Commissioners concerned do not in fact hold this view. They consider that where there was demonstrably no payment for carriage in a vehicle, then the making of a payment in respect of other matters would not involve operation for hire or reward.

"However, some of the methods used to finance the running of school minibuses would clearly be considered illegal unless the vehicle was properly licensed and operated as a public service vehicle. The most obvious one is the charging of fares to pupils or their parents. Other less direct methods could be regarded as at least legally suspect."

The traffic area offices and the department will be prepared to give guidance in particular cases, bearing in mind the role of the courts in interpretation of the law. "A second cause of confusion is the widely held belief that an EEC regulation requires a minibus driver to hold a PSV driver's licence. This is not so. Such a licence is only required when a vehicle is operated for hire or reward under the Road Traffic Act 1960."

Student mix-up
Exeter University students are demanding mixed halls of residence. They say that to advertise halls at the university as "men only" or "women only" almost certainly contravenes the Sex Discrimination Act.

Primary maths

Professor Geoffrey Matthews is to give two public lectures on the Nuffield Primary Maths Project launched 12 years ago. They will be at the Chelsea Centre for Science Education, Bridge Place, London, SW6, on March 5 and 12 at 4.30 pm.

Professionals have a duty to defend FE

Pressure on local education authorities to cut back on spending is becoming so great that further education colleges might soon have to consider giving up all their vocational training courses, the Society of Education Officers' conference was told in London on Friday.

Mr Roy Helmore, principal of St Alban's College of Further Education, said LEAs might soon ask themselves whether they should give up running further education altogether or, perhaps, suggesting that further education be funded separately from the rest of the education service. All these possibilities were "unthinkable".

"There is a duty on the LEAs to see that the 16 to 19 vocational courses are protected from the cuts and to ensure that outside training

is matched in the colleges of further education. The present system does not match the Government's priorities."

There was "widespread public dissatisfaction", much of it reflected in comments, particularly from non-educational bodies, on the lack of vocational training for young people.

"Professionals such as ourselves have a duty to explain to the public what we are doing and what our aims are, how cost effective we can be, what the policy options are and how much they cost. It is no longer good enough to put a notice on the door saying 'Professional at work—keep out'."

Earlier Mr Helmore said that more than half the young people in the United Kingdom entered work without any training. In Sweden and

Society of Education
Officers conference
Reports by Mark Vaughan

Germany the figure was much nearer 10 or 15 per cent. Advocating a "bridge" between school and work and a much more unified approach to education and training he said: "We must do something pretty quickly."

Day release courses had been "very badly neglected" partly because further education colleges had ignored training and gone for easier options like developing much more attractive full-time courses. Part of the difficulty was that every-one was undecided on just what day release should be for.

There was much concern about high unemployment but the most alarming aspect about it was the rising trend during the past 15 years. The two most vulnerable groups were the under-25s and the over-50s.

Ignorant of Bullock

Miss Sheila Browne, the Government's chief inspector of schools, criticized secondary school teachers for thinking that the Bullock report on reading was "just about young children and reading". Too often they felt it only concerned remedial and the shared responsibility of the education and social services departments.

She said that many secondary school teachers neither knew as much about the Bullock report on reading and the use of language as they should, nor understood its importance to them, their pupils and us.

Local education authorities should curricula for staff, parents re-examine the way they ran children of coordinating curricula for their 16 to 19 age groups and education.

Mr John Raa Price, director of small groups of students in the Borough of Ilkington, told the group of education was difficult, and ference that a joint HEA/DES conference should consider 16 to 19 on its own, appointment of a pre-school officer to coordinate what the whole period 14 to 19. The services and planning—such as the vertical supply policies in such such post in the HEA—had a need for modern languages other possibilities of cooperation between French.

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Polys aping universities

The Government should set up a Royal Commission on post-secondary education, Dr Keith Hampson, secretary of the Conservative Education Committee, said last week.

Speaking at Bristol University, Dr Hampson said: "The education of 16 to 19-year-olds should be put in a much broader context than the narrow one of everything post-school. Moreover, people will want to know the facts of the case for or against it."

He also called for an inquiry into secondary school standards, against the 11-plus, but which is opening in classrooms is more important than structures. "There should be no further extension of the universities, in addition to the polytechnics which have been set up."

He also criticized the "new colleges of higher education" which he said the DES had no intention of supporting. They were under-equipped, ill-equipped, capable of producing only inferior liberal arts degrees.

In brief

Play Day

June 19 has been nominated Play Day by Play for Children, the Government-backed campaign to improve the quality of play. Play Day is intended to draw attention to the lack of space for play in towns and countryside.

Award winners

The Institution of Mechanical Engineers have made awards in their design competition to R. B. Gilbert, John Laine Construction Ltd (gold medal and £450), A. V. Rudy and J. J. Millington, Leeds University (bronze medals and £150).

Essay competition

Barclays Bank is launching a new essay competition for sixth-formers studying for A level or equivalent exams. The top 50 prize-winners will go on a three-week sightseeing holiday starting in London and taking in six European countries.

Named after professor

The research library in the department of applied mathematics and theoretical physics, University of Liverpool, has been named the Fröhlich Library to mark the 70th birthday of Emeritus Professor Herbert Fröhlich, who retired in 1973 after holding the chair of theoretical physics for 25 years.

Schools listed

The 1976 edition of the *Directory of the European Council of International Schools* is now available from the council at 19 Claremont Road, Surbiton, Surrey at £3.10.

Management trainees

Organizations which have vacancies for trainee cost and management accountants this year are listed in new booklets *Vacancies for Graduates 1976* and *Vacancies for School-leavers 1976*, which are available from the Institute of Cost and Management Accountants, 63 Portland Place, London W1N 4B.

Charities helped

Alexandra Rose Day, with the help of the Bay City Rollers pop group, have raised between £25,000 and £30,000 for four new mini-buses to be given to charities.

Religious festivals

A world religious calendar of festivals for January-July, 1976, has been published by the Community Relations Commission as a teaching aid. In future the annual calendar will extend from September to the following August to help teachers with curriculum planning.

Threat to caving school

A grant of £32,425, half the estimated cost of saving Britain's only national caving school, Wharfedale Manor, from closure, has been offered by Sir Robin Brook, chairman of the Sports Council. The school, a converted Georgian mansion in Dentdale, Cumbria, since 1968, can no longer afford to run it.

Department of Education and Science
Scottish Education Department
Department of Education for Northern Ireland

Exchange your teaching skills

Teachers of French, German and European Studies in secondary schools, further education colleges, colleges of education and polytechnics are now invited to apply for

EXCHANGE POSTS IN FRANCE OR GERMANY

available for	School Year	1976/7
Spring Term	1976 (France only)	
Autumn Term	1976	

The exchange teaching schemes offer the most effective way of maintaining fluency and confidence in your teaching of French and German and give you valuable opportunities for a fresh look at your own ideas and methods, not to mention the challenge and new interests of life in another country. Attractive conditions include:

- Full UK salary with all incremental pension and social security rights safeguarded.
- One-year grants for dependent children.
- Personal travel expenses.
- Preliminary visit allowance and travel expenses.
- New increased cost of living allowances—
France: School Year £1335 Term £445
Germany: School Year £985 Term £328

Similar language-based exchanges are also available for Austria and Spain and exchanges in other subject areas for Denmark, Norway and a number of other countries.

Write for details and application forms to:
THE CENTRAL BUREAU FOR EDUCATIONAL VISITS AND EXCHANGES
Teacher and School Exchange Department

England and Wales: 43 Dorset Street, London W1N 3FN.

Scotland: Bruntsfield Crescent, Edinburgh EH10 4HD.

Northern Ireland: Department of Education,
Rathgall House, Balloo Road, Bangor,
Co. Down.

NEW!

COURSES AND SUMMER SCHOOL 1976

OPEN TO ALL TEACHERS, STUDENTS, AND LECTURERS

- THE TEACHING OF READING
(Directed by A. E. TANSLEY)
- THE MECHANICS OF TIMETABLING
- TEACHER INDUCTION AND SUPPORT
- AFTER R.O.S.L.A.—WHERE NEXT?

APRIL, JULY and AUGUST, 1976

The Professional Association of Teachers is proud to announce the development of a full series of courses which are open to all engaged in education, irrespective of whether they are PAT members or not.

Courses vary from weekend to eight day courses, arranged during the school holidays. Owing to the difficulties that many teachers are experiencing in obtaining financial assistance from their local authorities, arrangements for the Summer School courses have been made for deferred payment.

Full details of the courses and their cost, are available from the sponsors:

PROFESSIONAL ASSOCIATION OF TEACHERS
24 THE STRAND, DERBY DE1 1BE
Tel: DERBY (0332) 48672

COURSES

Middlesex Polytechnic

Diploma in Dance Education

University of London

for men and women teachers

A one-year advanced course, normally for those with five years' teaching experience. It is designed to provide a study of dance as art form and its use in education, closely related to the London dance scene. Course includes: the school curriculum; aesthetic education; expression and communication; dance and the community; performer and audience; choreography, technique, notation, accompaniment, style.

Applications now being accepted for September, 1976. Lecturers: David Henshaw (course leader), Martin Blogg BA, John Bolland, Wendy Cook, Janet Goodridge BA, Maureen Hume and visiting specialists.

Write or telephone for full details and an application form: The Course Secretary (Ref: D15A), Diploma in Dance Education, Middlesex Polytechnic, Trent Park, Cockfosters, Barnet, Herts EN4 0PT. Telephone: 01-449 9691.



IM MARSH COLLEGE OF PHYSICAL EDUCATION

FULL-TIME 1 YEAR ADVANCED LEVEL COURSES

DIPLOMA IN DRAMA IN EDUCATION

DIPLOMA IN OUTDOOR EDUCATION

For teachers of drama who want to work in greater depth, and for teachers of other subjects who would like to use the resources of drama in their own teaching. The aims of the course are to explore as many areas as possible that could come under the heading of drama, to go into depth in a selection of these areas and to help each teacher develop an individual style and approach.

This course is designed for experienced men and women teachers from secondary and middle schools. Additions to the basic programme options are offered and the full course provides opportunities for the acquisition of knowledge necessary for effective field work, and the development of skills to enable maximum educational use to be made of potentially dangerous areas.

Teachers successfully completing the course should be able to develop academically and practically the full range of outdoor activities.

Further details from: Principal, I.M. Marsh College of P.E., Barkhill Road, Liverpool L17 6BD.

ilea

Inner London Education Authority

why not become a teacher of craft and technical studies?

Mature men and women holding the following qualifications and who possess the appropriate experience are invited to apply for the Initial Craft and Technical Studies Teacher Training course sponsored by the Authority. Applicants will be expected to be not less than 25 years old at the start of the course. The course begins in September 1976 and lasts approximately one year. The Department of Education and Science generally grant qualified teacher status if the requirements set out below have been fully completed by the end of December 1976 and are accompanied by the minimum educational qualifications required for entrance to a recognised college of education (five 'O' levels or equivalent).

Graduate Dip AD

An appropriate technological degree.

HND

Three dimensional design, particularly in the areas of furniture design, products design, silversmithing, jewellery and other metalwork.

HNC

Plus two years appropriate industrial experience after the date of obtaining the HND.

HNC

Plus five years appropriate industrial experience after the date of obtaining the HNC.

Course members will receive Burnham salary and will be awarded the University of London Institute of Education Certificate in Education (Post-Graduate Certificate) on successful completion of the course. They will then be given permanent appointments to the Service and will be expected to remain on the competence may allow placement substantially above the minimum of the basic scale (£2,250 per annum plus 23% London allowance). Application forms and further information may be obtained from the Education Officer, references T2/CTIC, County Hall, London SE1 7PS (please include a stamped addressed envelope) and should be returned within two weeks of this publication.

Norway

Adult subsidies top list of priorities

from Mike Duckenfield

STOCKHOLM

The presentation and passage through Parliament of Government Bills providing new subsidies for adult education and rearranging the organization and financing of research are the two immediate priorities facing Mr Kjell Egeland, the new Education Minister.

Both Bills, due in the next few weeks, have been inherited from Mr Bjartmar Gjerde, the previous Minister, who has been promoted to Industry Minister in Cabinet changes following the retirement of Prime Minister Trygve Bratteli and his replacement at the head of the ruling Labour Party by 48-year-old Mr Odvar Nordli.

Although Mr Egeland, 57, is one of five Ministers without previous Cabinet experience and his background is markedly more academic than Mr Gjerde's, his policies are expected to be much the same, continuing the reforms to widen educational opportunities through the establishment of a network of district colleges and the expansion and integration of secondary schooling.

The new Minister is well qualified for both tasks. Members of the Norwegian Government need not be drawn from Parliament and prior to his appointment Mr Egeland was headmaster of Katedralskolen, a noted gymnasium (academic secondary school) in Stavanger and previously he has been both the head of the city's district college and a university lecturer in Sweden.

Whether he will have the chance to make a lasting mark at Norway's biggest spending department (nearly 12 per cent of the national budget) may depend largely on the outcome of next year's general election. At present the Labour Party, with only 52 of the Storting's 155 seats, is heavily dependent for support on the 16-strong Socialist Left Party. However, the latest opinion polls report that support for Labour has increased from 35.3 per cent at the time of the 1973 election to 38.1 per cent.

West Germany

Bonn faces new impact over vocational training

by David Dungworth

The long-standing controversy over the reform of vocational training flared up again this month with the submission to Parliament of counter-proposals by the Opposition Christian Democrats and Christian Socialists.

They reaffirm their continued support for the present dual system of training (provided by commerce and industry on the one hand and State-run vocational schools on the other) as laid down in the Vocational Education Act of 1969.

They therefore differ considerably from the Government's more radical reform bill which is now at the committee stage of its passage through the Bundestag.

The Government's scheme, whereby by all but the smallest companies would contribute a percentage of their wage and salary bills to a central fund from which bonus payments would be made to firms which train apprentices, is completely rejected by the CDU/CSU. Instead of the Federal Institute for Vocational Education proposed by the Government coalition, the CDU/CSU advocate the establishment of a much less powerful Central Office for Vocational Education.

Equal representation would be given to employers, workers and teachers in vocational schools on the committees dealing with apprentice training both at local level and at the level of the chambers of commerce, crafts and industry.

As the committees would act only in an advisory capacity, the chambers would retain their traditional

promise this season.

The new block grants, calculated on a population basis and accounting for about half the total education budget, will, the President believes, simplify the complicated system, get rid of inequalities between States, and focus Government resources on the poorest and most disadvantaged.

But there is one extra controversial proposal which has strong electoral overtones and is certain to be opposed by educationists: the obligation of States to match the Federal funds with their own money.

This means, as a spokesman admitted last week, that States will be able to abandon their share of individual programmes altogether if they wish.

The high education programme, which consists almost entirely of direct Government grants to students (\$1,800 out of a total of \$2,000) remains largely unchanged, except for a major cut of \$200m in repayment to private lenders of loans on which students have defaulted. There is apparently enough money left over from last year to cover this insurance.

Changes are now being made in the whole field of insurance of student loans, following a lengthy Congressional inquiry last year which revealed several scandals and abuses. The education budget allows for extra staff to administer the student loan programme.

The budget gives an extra \$20m

for the single member, normally a member of the order of the religious authorities, which even the school. Recently, however, pressure has come from several sources for a change in this arrangement.

Within the religious orders themselves, there is a group of people who argue that the old, hierarchical style of school management is no longer appropriate, and suggest that broadening management structures by involving teachers, parents, and others—an minority basis, naturally—is now necessary.

On the Government side, Mr Richard Burke, Minister for Education, has been making it clear to the present school managers that if they broaden their management structures by appointing school committees he will be able to make a stronger case to the Government for more finance for their schools.

The teachers are divided: probably a majority are in favour of

managing in different ways. Some school managers are in a better position to represent the teachers than others.

At present, teacher associations are all made by the teachers, and are purely advisory. A surplus of supply and the order of 700 teachers' managers are in a better position to represent the teachers than others.

Other second-level school managers are in a better position to represent the teachers than others.

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United States

Sweeping budget cuts condemned as 'inhumane'

from Michael Binyon

WASHINGTON

Universal cuts in a whole range of Federal programmes for primary and secondary education are likely to draw strong opposition to President Ford's budget for 1977 which revealed last week. Teacher organizations are urging Congress to reject the "inhumane" proposals.

The total amount proposed for education, \$6,235m, is some \$600m less than the budget for the current year, without allowing for inflation.

Several important programmes, including aid for disadvantaged children, will get more money, but the Government is either cutting or shedding responsibility for a whole host of others: adult education, aid to minority schools affected by the presence of the Government, ethnic studies, literacy programmes and provisions for gifted children are all affected.

The main change proposed is the financing of approved consolidation into a single annual grant to each State of 27 dollars per pupil.

With both sides firmly committed to the other's concept of a Ford strongly believes that education is an area where states should have more responsibility, and have the Federal Government flexibility to spend money as it sees fit.

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France

Universities look to 'relevance'

from William Farr

PARIS

The decree on the reform of second cycle studies prepared by M. Jean-Pierre Soisson and now endorsed and issued by his successor as Secretary of State for Universities, M. Alice Saunier-Seïte, completes—on paper—the reorganization of the structure and content of French university education.

The principles of the reorganization laid down in the law passed in November, 1968, in response to the student revolt of that year, it is expected that the change-over to the new system will begin in October, 1977.

The purpose of second cycle studies is defined for the first time as being the provision of knowledge and training at a high scientific level to prepare students for working life and the exercise of professional responsibilities.

Second cycle studies lasting in principle two years will be open to all those who choose to stay on after they have succeeded in obtaining the *Diplôme des Etudes Universitaires Générales* (DEUG) at the end of the first two-year cycle introduced in 1973.

At the end of the first year of the second cycle students will sit the licence or bachelor degree. Those who obtain it will be able to continue for the second year to obtain the *maîtrise* or Master's degree. The *maîtrise* will give access to third cycle studies lasting usually two years and leading to a doctorate.

The licence will also be a terminal degree for those who wish to leave. It will be a required qualification for admission to competitive examinations for category A civil service posts.

At universities, where the credit system is used, DEUG students who have obtained four-fifths of the credits required will be able to enrol for the licence and to sit for it if during the same year they obtain the rest of the credits. Students who are already working in a full-time job will be allowed to take more than a year to prepare for the licence.

The composition of the eight multi-disciplinary courses leading to the national DEUG—each with its own complementary disciplines defined by the number of teaching hours—is nationally prescribed and is binding on all universities. This is also the case at present for courses leading to the licence and the *maîtrise*.

The new decree states that courses will be specialized and, while providing basic academic and scientific education, will be given vocational and professional objectives.

Within these broad terms each university will be free to decide the subjects in which it will offer degree courses and the composition of the courses. The universities will also decide their methods of continuous assessment and terminal examinations.

Over the coming 18 months each of the 76 universities will submit its proposals to the Secretariat of State in order to obtain national accreditation for the degrees awarded at the end of the courses. Universities will be free to award diplomas in non-accredited courses but they will not rank as national degrees.

Proposals from the universities will initially be examined by one of a number of national technical study groups to be set up by the Secretary of State. A majority of the members of each group must be from the universities but a third must be representatives of the major economic, social and cultural activities of the country.

The groups are to take into account national and local employment situations in the professions towards which proposed degree courses seem to be directed. They will also take into account the distribution in different regions of different types of courses.

While the university presidents welcome the middle path which has been adopted for reconciling increased university autonomy with the maintenance of university degrees, the character of university studies and the university teachers' unions protest that this national character will henceforth be illusory.



Herr Rühle, block

autonomy to a much greater degree than under the Government installations, education, ethnic studies, literacy programmes and provisions for gifted children are all affected.

The main change proposed is the financing of approved consolidation into a single annual grant to each State of 27 dollars per pupil.

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LETTERS

Quality or cost effectiveness?

Sir,—As you rightly say in your comments on the Oxfordshire survey of 16 to 19 provision (January 2), such investigations provide valuable information, especially about the huge disparities in A level class sizes.

A straw poll suggests that a similar study currently being carried out by Surrey will produce comparable results: in further education colleges such class sizes are usually large, while in "new" sixth forms they are small. It would, however, be most unfortunate if such figures were taken as major indicators of some kind of cost effectiveness.

In neither study has there been any attempt to measure the results obtained. Some of these (and arguably the most important ones) are unquantifiable, but at least examination results might have been looked at. Crude examination pass rates would be a poor guide, of course, but results matched for previous achievement (especially O level/CSE attainments) would be worth taking into consideration.

We do have some useful information from national statistics and from those examination boards who,

at least until recently, distinguished ones may suffer from lack of personal attention.

In this respect it may be that there is some kind of "hidden" curriculum in the grammar school which whatever the truth about the class sizes, these present will not reveal it.

Needless to say, there are of further education colleges both large classes and results above the national average. In one—but we do have a qualified intake, and the small and "new" sixth-forms in the same position. The results are not matter of one and may be entirely false; the data are surely there; I wish to study the problem.

Surveys like the Oxfordshire are a valuable beginning, more than that in answering crucial questions of what is best for the pupils.

J. F. RADWIN,
16A Semaphore Road,
Guildford, Surrey.

Forgotten role for politics

Sir,—I once taught in a school where I had to teach "news" to every form, civics to the sixth form (all of them, not just the non-examination ones), and "progress of civilization" to the whole school. The head of that school was one of the founder members of the Council for Education in World Citizenship, which exists to promote non-party political understanding, particularly in the international field, among young people at school.

Most of the schools affiliated to CEWC in those early days had some structured current affairs teaching and usually ran some sort of extra-curricular discussion circle or international club. Some of this sort of activity presumably still goes on, but much has been absorbed in the teaching of humanities projects, foreign travel, exchanges, and so on.

CEWC itself has a continuous and consistent record since the 1940s of general political education; its conferences, particularly the Christmas holiday lectures in the Central Hall, Westminster, have year after year provided distinguished speakers, including many ministers of the crown, with well-informed, inquiring, articulate audiences of young people. Indeed many contemporary public figures got their early political education and confidence from questioning ministers on these stimulating occasions.

It is therefore depressing to learn of the persistent ignorance of a large proportion of young people. It is however important not to forget the aware and articulate minority and to encourage teachers to make fuller use of such agencies as CEWC, and Bernard Crick's new society, and so make many more pupils aware of the opportunities they have, in addition to classroom work, for political study and discussion.

MARGARET MILES,
Vice-President,
Council for Education in World Citizenship.

Love story

Sir,—My little son, at 10, is beginning to have romantic feelings about girls. There is one particular blonde in his life whom, for the purpose of this example, we will call Poppy Thompson.

He wants me to see Poppy, who does not reciprocate his advances. When I collected him from school he called out to a friend, "Where's Poppy?" This was a child of his own age, whom I know to be a sweet and charming little boy.

This pupil's face broke into a leer. "Dirty soul," he cried.

This attitude to the dawn of love has obviously been bred in little children through the media, and the influence of "liberalism." Sex is no longer thought to be secret and shameful; it is just dirty. At last we are free!

DAVID HOLBROOK,
Longacre,
Haverhill Road,
Stapleford, Cambridge.

Slowest set the pace

Sir,—Those teachers who are concerned that mixed ability language teaching may compromise the standard of foreign language learning attained by the top ability range will not have their fears allayed by Pat Brown's article (January 9) on the teaching of French in Hackney Downs, where languages are taught in mixed ability classes to the fifth year.

It seems that while making provision for the more able students to practise writing, exposure to French through reading and listening is restricted to the level at which the less able can understand. The amount of new language in mixed ability groups is strictly limited, which gives all pupils time to understand and use it correctly. She implies that comprehension "does on, but much has been absorbed in the teaching of humanities projects, foreign travel, exchanges, and so on."

The methodology advocated in the article, that comprehension should play a minor role in foreign language teaching, is based on a fallacious concept of the nature of comprehension and on a gross underestimation of the vital importance for language learning of exposure to language. Nor does it take into consideration the many techniques which can be employed to turn comprehension practice into a challenging and rewarding activity.

Listening and reading comprehension are not passive, automatic

Deplorable cutback on books

Sir,—I understand that Surrey County Council are facing a £10m shortfall in the context of the rate support grant for 1976-77. As part of Surrey education department's contribution to the cuts now being called for, the close-down of the school library service, reduction in caption allowances, and massive cuts in the county library service are proposed.

These proposals attack book provision for young people three times over, at a time when concern about reading has never been greater. Were they to be implemented these cuts could lead to:

● A shortage of books in both schools and public libraries.

● Withdrawal of all project support services such as study boxes, with consequent limitation of the curriculum.

● Greater problems for the library with reading difficulties, loss of interest in books, and a reduction in the quality of reading material.

● Possible closures of libraries, some used by children.

● Increasingly shabby book provision with a decreasing power to attract children to read.

● The use of outdated books through these, the dissemination of inaccurate information.

The School Library Association deplorable proposals such as which threaten the very heart of the library service.

H. C. BENNETT,
School Library Association.

Without due consideration

Sir,—We were surprised and disturbed to learn from the list given in your issue of January 2 that plans for the comprehensive reorganization of Brockley County Grammar School have been authorized or "accepted" by the Department of Education.

These proposals have been the subject of detailed objections, submitted at the invitation of the Minister in July last year, by the school's parents' association. So far the Minister has not even had the

Problems at the interface

Sir,—At the recent meeting of the Association of Science Education in Oxford there was a symposium on "The multi-science interface." To many it must have seemed that the interface was more in the nature of the San Andreas fault, with science and mathematics having little chance of a mix below university level. It is interesting that some years after the general introduction of modern mathematics there is no flood of new textbooks in elementary science based on the new mathematics. One teacher at the interface meeting appealed to a silent audience for any member who had managed to make anything of a marriage—as he confessed he had vainly tried to do.

It is a great pity that the useful and indeed paramount nature of algebra in science teaching at lower levels was not recognized by the SMP originators. More of the algebraic material could have been taught in that syllabus years earlier and with a little more emphasis. In this way science teachers could have been happy. Meanwhile conventional mathematics is gaining more than a little support from the teaching of scientists instead of the flow being the other way round as in years ago.

Surely technical colleges, employers and the numbers of harassed teachers of elementary science would welcome a swing of the pendulum away from teaching where there is a one-eyed approach by modern mathematics which can have ultimate significance to a much wider section than will more conventional algebra and geometry, and indeed arithmetic.

R. BALDWIN,
Shirley Warren Secondary School,
Southampton.

Good old days

Sir,—J. Dunning Davies (Letters, January 16) says that "the present O and A levels represent a fall in standards from the old Matric and Higher." Has anybody ever looked at examination papers in connection with this subject?

One Oxford School Certificate papers seem very easy to most O level candidates today, especially in the sciences. A very high marking standard would be needed to bring them into line with present papers.

FRANK REED,
Combs Middle School,
Stowmarket, Suffolk.

Membership wrangle upset plan for general council

Sir,—On the "Question of conduct" raised by R. D. McLean (January 9), let me put the record straight about the proposed formation of the General Teachers' Council.

The latest proposal was not a government one but the result of a working party, the impartial chairman (who gave it its name of "Weaver") being from the DES while the teachers were in a majority. The working party began its work with the premise that the GTC would have teachers in a majority. Teachers did not at any time reject the recommendations of Weaver. A subcommittee of the working party meeting in Hamilton House on September 16, 1969, unanimously accepted the following recommendation which was subsequently endorsed by the full committee that membership would be made up as follows:

A total of 40 members (to keep the GTC workable), 25 being non-teachers by their respective associations: NUT-10; NAS-3; ATCDE-2; ATTL-2; AAM-2; AAM-2; NAHT-2; AFM-1; Heads Conf/Ass. of B. Masters-1. The remaining 15 to be appointed by the Secretary of State.

This is hardly teachers in a minority. The reason the NUT never publicly pursued these proposals was the minority position they were to be placed in. It is this (and not the fact that the NUT, they have never attempted to justify their inflated membership figures which keep them in a majority position on Burnham) that has led to the present situation. This letter?

Schools can look after their own standards

Sir,—The universities these days are readily depicted by their critics as insular and pumpered institutions, indifferent to and ignorant of the problems faced by the rest of the education service. I for one am depressed to find a distinguished group of English academics writing to you on the matter of 16 plus examinations with the seeming purpose of proving this view correct (January 9).

Professor Gifford and his friends are hostile to internal assessment of English in schools. For this they can presumably have only two reasons. Either they believe that English teachers are not academically competent to do their own examining, or they believe that teachers give such power will misuse it for the undeserved profit of themselves or their pupils.

If the first, it is hard to see how they can place any greater confidence in O and A level, the results of which inevitably reflect not only candidates' ability but the nature and quality of the teaching they have received (not to mention the additional vagaries of the examining system itself). If on the other hand, teachers' motives are to be held suspect, what accounts for their widespread reluctance to undertake internal assessment and to abandon even the dubious objectivity of the existing system?

The fact is that teachers value an external measure of their own and their pupils' achievement, above all in a subject such as English where

all measurement is problematical. It is, of course, an obvious weakness of the present GCE that it cannot measure teachers' and pupils' achievement simultaneously and separately, yet is treated often by schools, and almost invariably by universities, as if it did.

Whatever your correspondents' exact suspicions, they are clearly custodians of "standards" and that largely for the convenience of their own selectors. Such unwarranted presumption is bad enough in itself. It is worse still when expressed by a group including people who (a) have no professional training or qualification as teachers, (b) have little or no first-hand experience of the non-academic majority of schoolchildren, and (c) are themselves habitual users of internal assessment in awarding degrees, relying for such objectivity as these possess on the submission of limited samples of work to an external examiner they have personally chosen.

Few people would minimize the pervasively insuperable problem of designing a common examining system at 16 plus. But it might be asked if teachers of English in higher education could bring themselves to accept that the form part of the same professional community as teachers of English in junior, secondary, and further education. On the evidence of Professor

Gifford's pronouncement we are still a long way from that.

PETER HOLLINDALE,
Senior Lecturer in
English and Education,
York University.

Games governors play

Sir,—Contrary to Peter Scott (January 16), I believe far too many governors and managers "owe a greater loyalty to the political organization by which they were appointed than to the school."

At the initial meeting of governors, the immediate play is the game of Capture the Chair. If there is a clear majority of one party, there is no problem; if there is not, it is necessary to lobby the independents beforehand, in order to ensure that these independents can be there after the next manoeuvre to ensure that any proposal is henceforth the more easily carried.

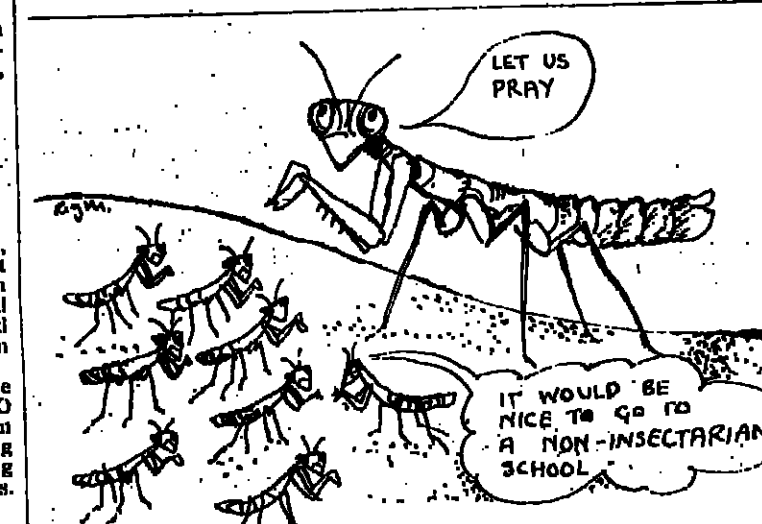
After three meetings, I can tell the political allegiance or non-allegiance of every governor. Almost any proposal by a member of one

party is a guarantee that it will automatically be resisted by representatives of the other political parties. The caucus ensures that on the fundamental issues arising from the agenda, every member will know how to vote.

Thus, the roles are prescriptive, on a stage dominated by ad hominem insults whose mock-raging dialogue and postures are predictable and transparent.

I am not so naive as to think that independence of view has any virtue in itself. What I am arguing is that this party line precludes an open exploration of possibilities, and the interests of the consumer are secondary to political expediency.

PATRICK McGEENEY,
83 Park Road,
Buxton, Derbyshire.



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Paul breaks 2 weight records

Paul Pines, in his fourth year at St Nicholas Grammar School, Northwood, Middlesex, broke two British schoolboy weightlifting records during the national championships in London at the weekend. In the lightweight category he set records for the snatch (92.5kg) and two-lift total (202kg).

Paul, who comes from a sporting family (brother also a lifter and father an amateur wrestler), was easily the outstanding competitor. His total was 37kg more than the winners of the two heavier divisions—middleweight Nicholas Fry (Hreed Burna School, Swindon) and light-heavy Paul Birstones (John Fisher School, Chatham).

The other champions were M. Bickersniffe (Woodfield High School, Doncaster), Martin Brown (Lockleaze School, Bristol), P. Town (Houghside High School, Leeds) and two 1975 winners—Ray Williams (Holyhead Comprehensive School, Anglesey) and Richard Swales (Gaywood Park School, King's Lynn).



Martin Brown: taking the strain.

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League club joins school to help city's youth

by Asif Khan

Coventry City Football Club have joined hands with Sidney Stringer School and Community College, Coventry, and the Duke of Edinburgh's Award Scheme to offer a new leisure time programme to young people in the city.

It was an attempt to "harness the energy of Coventry's young people in the right direction", said Jimmy Hill, the television football pundit and managing director of the club, at a press conference last week to launch "Enterprise Sky Blue".

The scheme offers a balanced programme of leisure time activities for young people between 14 and 23. They will be able to find out about it from the club's main office in Hightfield Road, which is being turned over to the award scheme for several evenings a week. The club will also be letting their young fans know about it at all home games during the rest of the season.

Two teachers at Sidney Stringer, Mr Geoff Rivers, who teaches

mathematics, and Mr Ian McDonald, who takes crafts, are involved with the scheme.

Mr Rivers, a gold award winner, said seven pupils had already been enrolled, and they expected more would join as the scheme became more widely known. Boys and girls attending other institutions would be welcome.

Sidney Stringer School, which is modern and well-equipped, will be the main centre for activities. It has its own theatre, squash courts, library and workshop, which includes home economics.

The award scheme's section "design for living" is popular with girls, and can also be entered by young men at the gold award level. Participants will also be able to take advantage of the facilities at Hightfield Road. The Coventry Junior Chamber of Commerce have promised to raise £500 to assist in the scheme's operation in the first year.

Mr Charles Ward, Lord Mayor of Coventry, said the city would give the school and the club all the help it could to make the scheme a success.

Too many feet on the hills

The very popularity of the Cairngorms with school parties, mountaineers and hill walkers was bringing unacceptable pressures to the area, said Mrs Mollie Porter, leader of the Cairngorm Mountain Rescue Team, at Aviemore last week. Erosion was already taking place on many of the paths and the numbers who flocked to the area would have to be limited if irreversible damage was to be prevented.

Part of the problem stemmed from the welcome increase of interest and training in mountaineering, and paradoxically Glenmore Lodge Outdoor Training Centre, about eight miles from Aviemore, contributed to this process. Those trained there went into schools as instructors, widening knowledge about the mountains and creating interest among pupils.

Mr Fred Harper, principal at the Lodge, said that the best solution was to educate the public about the mountains and creating interest among pupils.

Glenmore Lodge trains about 2,500 people each year in outdoor activities, most of them from Scotland. Mountaineering involves about 1,500. Six weeks in the year is given over directly to school parties.

Rugby row flares over ages

by Stanley Levenson

Anglo-Welsh school rugby relations are in the doldrums. The Rugby Football Schools' Union and the Welsh Schools' Rugby Union are unable to see eye to eye on what seems to be a simple matter of grouping.

Because of this a match at Twickenham, scheduled for next month, has been cancelled although there will be a fixture at Cardiff on March 13, there are plans at present for further under-16 internationals.

There is no quarrel and both English and Welsh want to continue their junior matches which began more than 70 years ago.

The difficulty arises from England's wish to have 16 as the ceiling while the Welsh have decided to return to the former under-15 category. The difference arose when the school-leaving age was raised two years ago.

The RFU want to be able to include all rugby players of secondary school age. There are good reasons for this. The growth of comprehensive schools has increased more boys to rugby, in many are 13 or 14 before they start to fling a rugby ball about.

Many of them are not experienced enough for representative matches until a year or two later. The RFU believes that the current year is important.

For the Welsh, of course, rugby is much more part of a way of life and the structure of their organisation is very different from that of England.

Mr Viv Griffiths, secretary of the WSRU, says that, apart from school matches, there are district games. School matches in competition such as the Dewar Shield are for under-15s. The older boys get their rugby through district matches, but are eligible for inter-school competitions without benefit to the schools.

Both sides have good reasons for their stand but it would be a pity if a solution was beyond them. Apart from anything else, they are important links in the ladder leading towards senior international honours, and, despite the recent setbacks, the January 17, both countries need this nursery system.

People

The Duke of Edinburgh has become patron of the Simplified Spelling Society.

Mrs Ann McMullen, head of the Education department of the British Epilepsy Association, is to succeed Miss Mary Georgy as director and secretary of the Electrical Association for Women on March 1.

Universities

Sir James Menter, FRS, director of research and development, The Investment Group, and vice-president of the Royal Society, to be principal of Queen Mary College, London University.

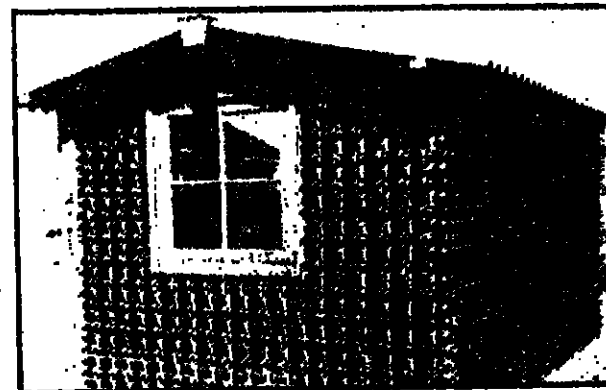
The Rev G. B. Caird, principal of Mansfield College, Oxford, to be Dean Ireland's professor of the exegesis of Holy Scripture.

Dr J. E. Banerjee to receive the title of professor of clinical virology in respect of his post at St. Thomas' Hospital Medical School, London. Dr J. P. Moss to receive the title of professor of orthodontics in respect of his post at University College Hospital Medical School, London.

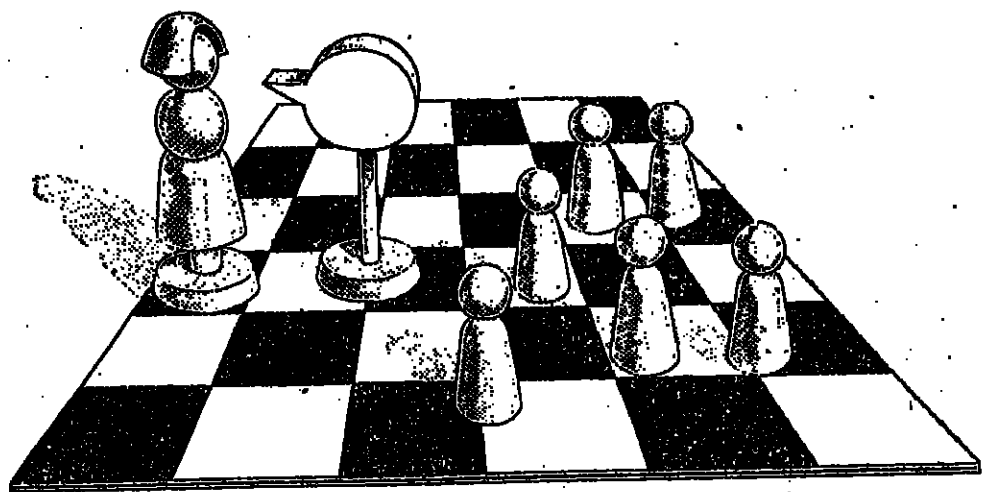
Schools

Mr Neil Hawkes, deputy head of St Michael's Primary School, Bury, Cheshire, to be head of Braywood Primary School, Winkfield, Swindon and Abnield (Essex) on February 15. The next steps are the head of Fairfield High School, Cheshire, to be head of Fairfield High School, Dryden, Manchester.

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Talking in class

Douglas Barnes suggests we have to 'play the anthropologist' in order to grasp what is really going on in the classroom

Schools are places where people talk to one another. And where they write for one another. Nothing could be more obvious. But is it as straightforward as that? Is not most of the writing done by the younger persons present? There is usually an older person called a "teacher" present in the room where young "pupils" are writing: does he also write? We certainly see these teachers writing with chalk on certain walls though they seem annoyed when their pupils write with chalk on other walls. What they write also seems to be rather different. The teachers also make red marks on the papers which their pupils give them. Although the children do pieces of writing to give to the teachers, we do not seem to find many teachers doing pieces of writing for the children. There seems to be some agreement about who writes where, in what way and about what subject-matter and for whose eyes. Sometimes the teacher seems to enforce the arrangement, but for the most part it is tacitly agreed, but for the most part we do not see any children making marks in red ink on other people's writing.

Perhaps there are also agreements about who talks to whom, and when and how. We eavesdrop on one lesson and notice that although there is only one adult in the room, she seems to be talking more than all the children together. She is the centre of everybody's attention: she asks many questions, and demands answers as of right: "What other ways are there of measuring it?" she asks, and goes on urgently: "Come on. More hands up. Have you all gone to sleep?" In spite of this urgency she seems to know the answer already, for she dismisses several suggestions until one comes which she greets with: "That's it. Good answer, John." Her young pupils ask hardly any questions, except for permission to fetch ink from the cupboard. When one or two children about answers without first being named by her, she checks them with a cryptic "Hands?" which they seem to understand as a reproach. Only one child changes the subject of the conversation; he tells an anecdote about his dog, to which the teacher listens politely but

with some signs of impatience. No child asks questions like those the teacher asks; no pupil says: "What is normally awarded for an unfair charge outside the penalty area?" or continues: "Really, Mrs Jones, I would have thought that by your age you would know something as obvious as that."

If we look in at Mrs Jones's class tomorrow we may see a different pattern of behaviour. Perhaps every child will be writing or drawing, while Mrs Jones walks round engaging individuals in conversation about their work. Every now and again she indicates by an accusing look or word that silence is expected, but in fact she tolerates a good deal of surreptitious conversation—a strange contradiction between explicit demands and behaviour which pupils and teacher alike covertly accept. On another occasion a child tells the class about something she has done, until her hearers' interest wanes, and Mrs Jones steps in with a firm voice to command attention. Occasionally the class works in groups, perhaps with apparatus or in preparing a group presentation of some kind. Then the room is full of noise, and from time to time Mrs Jones unceremoniously hushes the children, particularly if someone passes in the corridor. But time and time again Mrs Jones and her class return to the pattern of communication in which we first saw them, when Mrs Jones uses her voice to control and shape the thoughts and attention of the class.

Of course, we all "know" why the children and the teacher are there in the classroom. We know because we have learnt about schooling by taking part in the game. We have all learnt to play the "pupil" position. Many of us will have played in the "teacher" position too.

For us this has become invisible knowledge, invisible because we take it for granted. It is hard to recover invisible knowledge and see it afresh; how would we perceive a classroom if we had never seen it before? All we can do is to play the "anthropologist": we can pretend to look through ignorant eyes and ask questions about what Mrs Jones says to her pupils, and why they respond as they

do. But to frame the questions and answer them we must grope towards our invisible knowledge and bring it into sight. Only in this way can we see the classroom with an outsider's eye but an insider's knowledge, by seeing it as if it were the behaviour of people from an alien culture. Then by an act of imagination we can both understand better what happens and conceive of alternative possibilities.

Here are some of the questions that we can ask. Who has decided that the patterns of talk and writing are as they are? Who decides what constitutes "shouting out" or "untidy work"? How do these patterns change? How do children—or teachers—learn them? How much of what goes on contributes to children's learning and how much performs other functions? What are these functions? And are these different from the purposes which teachers and pupils believe them to be serving? Does their behaviour always match their conscious intentions? What in fact is the connexion between the teacher's intentions and the day-by-day life in the classroom?

Every classroom has its ways of going about things. Although teachers do not like to be told so, these are surprisingly constant from one classroom to another. They include, as I have suggested, very complex patterns of expectation about who says what to whom and when. But they also include ways of making sense of what happens and these are not by any means static. The meanings available in the classroom are open to perpetual renewal and change; for the reason there are dangers in the metaphor which I have been using of classroom learning as a game with rules to be learnt. This may describe some classrooms, where the teacher and tradition determine the rules and the children have to learn them before they can join in the game. But it is a very different kind of game in other classrooms, where there may be areas bounded by rules but other areas where the rules themselves are open to change. It is not easy to think of a game in which the point lies in changing the rules as you play it; so here the metaphor loses its value. I mean that children are not

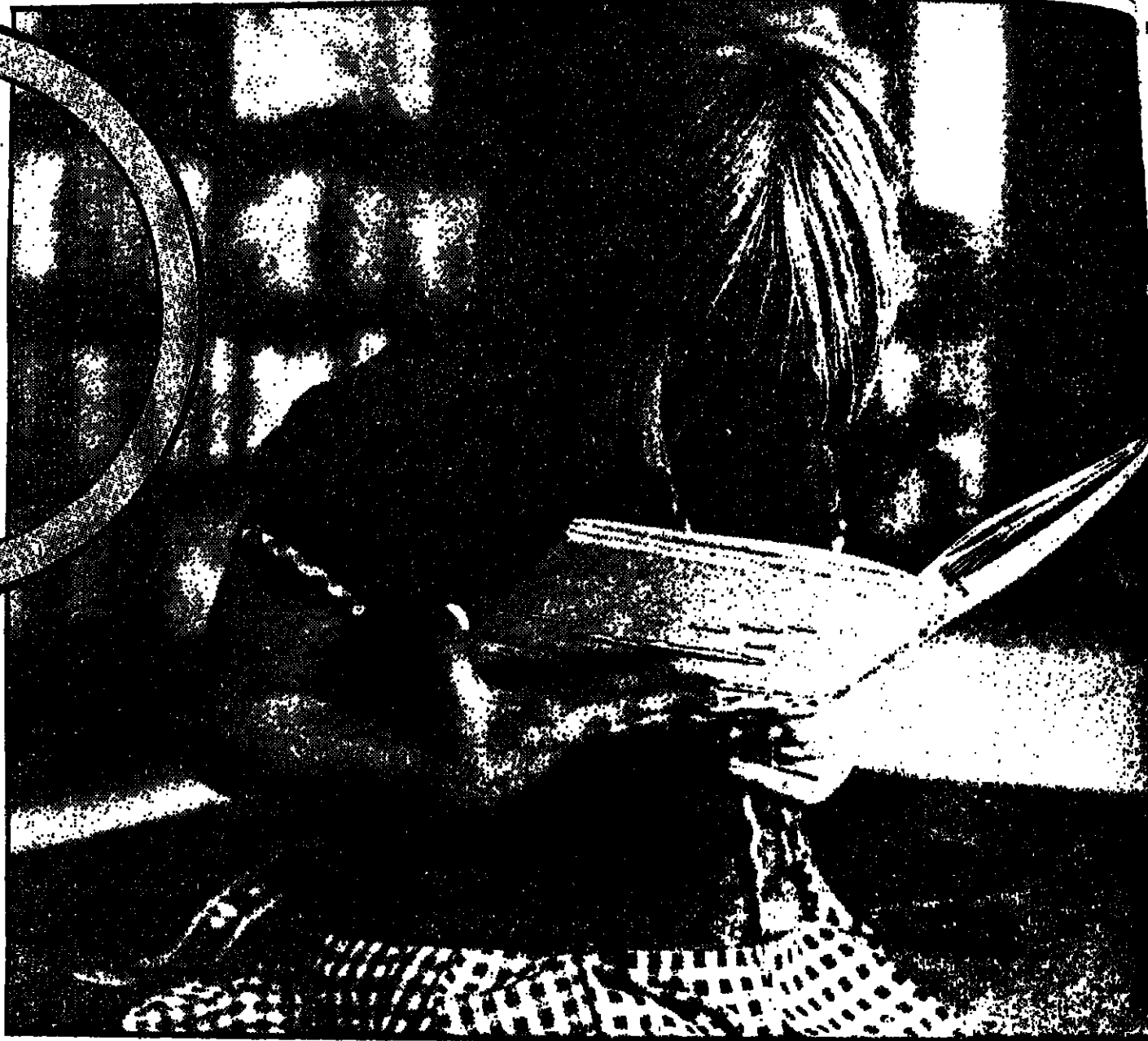
merely passive recipients; in many classrooms they learn ways of making new meanings.

Of course, it is not only in classrooms that people talk to one another. Outside in the street, in shops and buses, in offices and on building sites, people are constantly talking. No doubt we could frame rules for what a shopkeeper can say to his customers without going beyond "shopkeeper" and becoming "fellow human being". Even these temporary relationships are potentially infinite, capable of developing new common meanings as acquaintanceship becomes friendship and so on. In one way schools are different, because unlike shop, bus and building site they are there purely for the talk. A school in its very nature is a place where communication goes on; that is what it is for. Education is a form of communication. (I must hastily ask you not to translate this into, "All teachers have to do is to tell their pupils what they need to know.")

When people talk about "the school curriculum" they often mean "what teachers plan in advance for their pupils to learn". But a curriculum made only of teachers' intentions would be an insubstantial thing from which nobody would learn much. To become meaningful a curriculum has to be enacted by pupils as well as teachers, all of whom have their private lives outside school. By "enact" I mean come together in a meaningful communication—talk, write, read books, collaborate, become angry with one another, learn what to say and do, and how to interpret what others say and do. A curriculum, as soon as it becomes more than intentions, is embodied in the communicative life of an institution, the talk and gesture by which pupils and teachers exchange meanings even when they quarrel or cannot agree. In this sense curriculum is a form of communication.

Douglas Barnes is senior lecturer in education at the University of Leeds Institute of Education. This extract is taken from his book 'From Communication to Curriculum', published yesterday by Penguin (90p).

Feature articles on two central themes of the Bullock Report, nearly a year after its publication



Down with standards

Martin Leonard argues that the attempt to gather valid data to measure educational standards is bound to fail

In the continuing debate on educational standards, there is one point of view which has not been sufficiently aired: that the attempt to gather useful national data on the question of any major educational standard is certain to be wholly abortive, and that the expenditure of valuable resources to that end should therefore cease.

Such data would undoubtedly be immensely valuable, but this must not blind us to the reasons why they cannot be collected. The Bullock Committee have given us a splendid example of such blindness. After spelling out in unanswerable detail why current data on reading standards are inconclusive, they recommend not only a further attempt at gathering them, but also, unbelievably, the vastly more difficult task of monitoring standards of writing.

It is time to come down to earth. To expect success in such endeavours is to fly in the face of history, of statistics and of reality.

The history of educational standards should be sufficient to cast doubt on much of the optimism of the standard-bearers. Few educational policies have ever been as universally condemned as payment by results: data from public examinations over the past hundred years have yielded little of value. "Performance contracting" failed. Most statistical data now available for comparison with future results are of doubtful value, particularly on the two key items of reading and numeracy.

Even the optimistic Bullock Committee realised that no useful data on reading standards could be available until 1977, thus making that the base date for subsequent comparisons. For mathematics the base date will be later still, even in the unlikely event that the current National Foundation for Educational Research studies on mathematical attainment tests yield workable results.

When setting up a statistical investigation, it is clearly prudent to arrange matters so that the results will stand up to criticism. In this case most of the requirements are obvious enough: a fixed test, random sampling, strict control over test conditions, no attempts to influence the results by coaching, and so on. But the statisticians' ideal can never be reached in practice, and they have to make do with what they can get: the art of experimental design is the art of the possible. In this case the chasm between the possible and the ideal is far too wide for the accurate measurement of any relevant statistic. In other words, the standard error of measurement will always be large compared with the differences between successive measurements.

The first snag in the experimental design is that a test soon goes out of date. It has happened to tests of reading and mathematics; it has happened to verbal reasoning tests; it would certainly happen to tests of writing, spelling and the cognitive skills. The NFER idea of dummy items—the inclusion of new items, initially on a non-scored basis in order to assess their level of difficulty—would introduce biased errors, fatal to trend analysis.

The scale of a test with full national coverage would be astronomical. It seems to be agreed that some form of sampling would be appropriate, and to statisticians this is no problem: random sampling will yield results in which they can place total confidence.

But a single-stage sample (that is, the selection of individual names from a list of all children of the required age

group) presents formidable, though not insuperable, difficulties. (The educational standard-bearers have just one banner worthy of being held aloft, that of the National Child Development Study, whose 1958 cohort, using a national sample based on dates of birth, produced more useful data than all of the NFER's contributions to this subject within the last 20 years.) Rightly or wrongly, it seems to be accepted at present that a two-stage sample, school then individual, would be required.

A random sample of schools is easy enough, and a correction to allow for the differing sizes of school can be built in. But the choice of a sample from a school population has clear dangers, on account of the vested interest which head teachers have in the results. (Anyone who doubts this should look at the case of the 10 per cent sample survey built into the 1961 Census, in which a bias against large families caused by enumerators who failed to follow instructions, produced serious errors.) Quite apart from this, a fairly high percentage sample of schools would be necessary if figures on regional variations were required. There is room for differences of opinion on this: 10 per cent for primary schools and 20 per cent for secondary would probably be about right. (A larger sample for secondary than primary, because there are fewer schools, with greater differences between them.) The inevitable consequence is much disruption and vast expense. Light sampling will get us nowhere.

There is a further point of statistical relevance. When tests were carried out in the United States to assess the effect of fluoridation on water supplies, the reduction in the numbers of decayed, missing and filled teeth in the test sample, compared with the control, was about 50 per cent, a figure high enough to make clear that a very striking change had taken place.

But, no one expects changes of this order in any national statistic relating to educational standards. Even a clear trend, say four movements in the same direction in consecutive years, is unusual. So statisticians have to work out their standard errors and coefficients of validity, look up their chi-square tables, and churn out significance levels which few people fully understand. Certainly such conclusions are not likely to make much impression on the National Council for Educational Standards; they may not even impress other statisticians very much.

Curricula at all levels, methods of teaching, patterns of school organization and the expectations of the outside world have all been changing rapidly, and will continue to do so. The changing balance between the public and private sectors, affecting as it does a significant proportion of the brighter children, would on its own be sufficient to disturb the general trend. To identify, isolate and measure accurately a single variable in such conditions is like looking for a calm anchorage just off Cape Horn.

If, by some remote chance, any conclusive data came to light, the cause would still not be known, and the debate would continue to rage. We do not have the resources to squander on such baubles. Let us stop it now, send the DES Assessment of Performance Unit out to grass, and get on with the business of education.

Martin Leonard is a schools inspector for Walsall, with special responsibility for mathematics.

What is reading?

This article by Leonie Barua is taken from a pamphlet put out by a group of English teachers at Clissold Park Comprehensive, London, who wanted to raise some controversial questions about reading and language development with other teachers in their school

Reading is not an activity that is always the same. It is an experience that may be different on every occasion. It may depend on what we are reading and our intentions in reading it.

If I am reading a story that a child has written in an English class, I might read it in different ways. I might concentrate on spelling and punctuation. We have all had the experience of reading a piece of work and correcting it, only to come to the end and realize we haven't actually read it at all. So we have to re-read it, in order to understand and take it in, and see what the child is getting at. Children themselves are aware of this different kind of reading, for if one starts to correct a story straight away, they will often say, "No, don't mark it yet, read it properly first."

I could read the story very quickly, flicking over the pages to get the gist of it; or I might read it slowly and carefully, to see what the story is about; or I might read it to see if it is well written, trying to gauge how deliberately the child has ordered the story, and looking for details of style to comment on.

Reading may be more or less enjoyable on different occasions. We enjoy reading when we understand what we are reading. If someone wants to lend us a book, we like to know something about the book first; we feel we may get more out of it then. In many ways, children's experiences of reading are no different from ours. It may help if children know what a story is about before they read it; they know a little better what to expect.

Similarly, the most successful reading

material for inexperienced readers is often their own writing or that of other children. It is not merely that they will be familiar with individual words. They will also be familiar with the speech patterns and general language in this kind of material; the subject-matter may arise out of a shared experience; and they will expect to understand it.

Children's own work is often much better written than the readers specially designed for them. Children often read the writing of other children, in the original handwriting, spelling mistakes, omissions and all. This should make us question the idea that you have to recognize a word at a time in order to read. If you are reading, expecting to understand and enjoy what you read, you will probably be reading in a different way from reading, expecting it to be a difficult task.

It is only when you are reading with a purpose, and reading for meaning, that reading makes sense—indeed that you can read at all. This is particularly true of the inexperienced reader. For example, a child can be reading aloud to a teacher, sounding out the words and reading with difficulty, but five minutes later be reading a part in a play with another child, and reading fluently and expressively.

If children have never experienced this kind of reading, they are unlikely to want to read. It is the experience of reading with understanding and pleasure that will be of most help to them. By this I do not mean only reading for themselves, but also other experiences of reading, such as being read to, listening to people tell stories, telling stories, and seeing

other children and teachers reading and writing with enjoyment.

All these activities are missed if children are withdrawn from their normal lessons. Not only do we often underrate these activities, but we neglect to consider them as part of reading. A friend, concerned that her son of six was considered "lazy and uninterested in reading" by his teacher, remarked that he often asked his grandfather to read to him; but she always told him to read for himself because he was lazy. Of course, the child was interested in reading—he wanted to be read to—but he was also setting up for himself an experience from which he could learn, if he'd only been allowed to.

When we are reading with enjoyment and excitement, we are actively doing something. What we are doing varies according to what we are reading, and is difficult to define. In general terms, our minds are "working" on many levels. And in many ways hard to distinguish. All of this is reading. We may be referring to our experience of life and of other reading, using our imagination and intellect to bridge the gap between us and the writer, and reading will in turn extend and shape our experience. If it were a matter simply of decoding, we would never have had the experience of re-reading a book a second time, and understanding it more clearly, or seeing it differently.

We may think of this as a quality of reading which is highly sophisticated, relying on years of development and training, only to be acquired with maturity and experience once you have

mastered the "basic skills". While this may be some truth in this, two-and-a-half-year-olds who are beginning to read language that even a non-reader brings to a book. Every child who begins to be engaged in what are called "reading lessons" must be encouraged to read and become involved with the text. They are to become mature readers.

When I worked in a playgroup under five, the children not only listened to stories, but were encouraged to interrupt them to tell relevant personal anecdotes, to comment, to give opinions or question what was being said. They also loved to hear the same story over and over again, and would look at books on their own reflection.

These kinds of reading experience are often destroyed by the sterile attempt offered by graded reading schemes. Children begin to see reading in terms of a book in order to move on to the next one. Sometimes they are allowed to pick and choose and read what they want until they have finished a scheme, and this might take a year or more. Meanwhile their private reading may suffer, or be abandoned. The re-reading a story many times is intrinsic to that of a graded reading scheme. It is the experience of reading that invited a second reading.

Children are given interesting, well-written books to read from the beginning, otherwise the value and purpose of reading is lost. A number of children asked recently to write down the titles of the first books they read, wrote "1b" and "1c". The memories of their early reading experience can be revealing.

We should not underestimate children

and should remember the experience of text but not recognize it in another, because we are unfamiliar with its different use or meaning. The words may be spelt the same, but words change their colour.

Simply asking children to read aloud, and then correcting their mistakes, may not only be unhelpful but disastrous. If we must hear children read, it is an activity that demands expertise and sensitive judgment, and must not be undertaken lightly by anyone who just happens to have the time to do it. Nor must we think of reading as though it were separate from talking and writing, and all the other language difficulties. Sometimes it may be more helpful to approach children's reading through their talk or writing.

The teacher of reading should be thoroughly acquainted and involved with the children's writing, not only in English but also in their other subjects, and be alert to the ways in which children listen and talk. Perhaps we should not talk of reading at all. I agree with those people who talk instead of readers and texts. Once one begins to think of the meeting of readers and texts, it is easier to imagine more clearly what our own experience of reading is like. And from that understanding we shall best be able to see what it is that children are trying to do in their learning of reading.

A longer version of this article appears in "The Learning of Reading", a pamphlet circulated by the English department of Clissold Park School, London. Leonie Barua now teaches at Fincham Park School, Coventry.

The 'cult' in culture

Michael Clarke
on
art and society

Art in Society, By Ken Baynes, Lund Humphries £12, 85331 380 6.

Most social histories of art are Marxist, and therefore dialectical in approach; Art and Society, Walter Benjamin, who writes so much recent criticism depends, was despite many Marxist sympathies, castigated for his lack of dialectical correctness. Ken Baynes rejects even Newtonian cause and effect from his argument, preferring a more Structuralist approach. For Baynes, the traditional histories of art, both East European and West European, are distortions. The true nature of culture lies in its unity; *Art in Society*. He relies heavily on recent anthropology and communications theory, quoting George Steiner's "semantic whole of authorship and reading" in classical culture to make his point and referring to jazz in New Orleans, miners' songs in Durham, and even the samizdat press in Soviet Russia as parallels. "A culture is a whole thing existing in a particular place and time", and, "Art of every kind was involved in interpreting to the individual the meaning that society placed on his or her actions". A proper perspective should include all the art products of a society and not only those blessed by galleries and museums.

The most influential idea in Benjamin's much-quoted essay, "The Work of Art in the Age of Mechanical Reproduction", is the way in which mechanical reproduction has transformed the art of the past. Benjamin showed how this has substituted plurality for uniqueness and how it is paralleled in universal equality. The cult of art has diminished, despite attempts to replace it with some other aura like authenticity. The work of art has become a commodity to be exhibited and bought, and its meaning is detachable. Art has become political, a tool to be used.

Baynes is very much aware of this. The transformation of art is uppermost in his mind, and he asks, "How has technology changed art through painting, photography, cinema and television? What relevance have traditional forms of criticism to the social function of art? How are forms of art used by society to foster ends it considers good? Can art be genuinely subversive—has it any direct political role? What relation to the effectiveness of communication have aesthetic principles like harmony and proportion? What kinds of standards are significant in assessing art's social function? Is it appropriate to consider standards at all?" These are grave questions which demand serious consideration. Baynes's book has much to its credit, but it falls far short of coming to grips with the issues it raises in anything like the depth they require.

Benjamin wrote that the cult object need only exist in society to be revered. The Renaissance prized upon this situation by emphasizing individuality—particularly genius—and by laying emphasis on the unique. The emancipation of art from its parasitical dependence on ritual was made complete with the advent of photography. The work of art could then be seen anywhere, any time. Its exhibition value became paramount and its meaning transmittable.

Art in Society is itself dependent on four exhibitions arranged for the Welsh Arts Council, and which form the four sections of this book: *Worship, Sex, Work, and War*. One of the book's pleasures is the variety of material employed. Baynes does not go so far as John Berger in *Ways of Seeing* (a book frequently called to mind), and include purely visual essays, but, like Berger, he recognizes the way in which pictures' unique impact is qualified by words and by the visual material considerable independence. In keeping with Benjamin's diagnosis, the reproductions are inserted appropriately in the argument of Baynes's book. They are no longer the objects themselves but transformations serving Baynes's purposes. It is at this level that the book disappoints—by not being radical enough.

It is not only, as Baynes thinks, the lack of any appropriate model for the plurality of contemporary society and art that makes it difficult to answer the questions raised. It is also the level at which he deals with them. Some of the questions are not really dealt with at all. What of art which defies public morality? Is there any subversive art? Baynes does not answer. He is certainly right that propaganda has become less an aesthetic novelty than a central element of twentieth-century art, but, despite his commitment to all activities and forms, he makes



Above:
The Great Sea Serpent of 1848
A cartoon showing
liberty attacking the crowned
heads of Europe
Left:
Moslems at prayer in Nairobi
Below:
A bazaar painting from Calcutta
illustrating an
Indian proverb reflecting the
power of
the wife in Indian society



no mention of the great library of propaganda text by modern artists, and ignores recent activists like Josef Beuys, who do not always produce an object at all in any of the usual meanings of the word, and yet are fully engaged politically.

Even the more popular mixed-media events and happenings, products of the new technology and equality, with their audience participatory aspect, are neglected. He notes art's new ability to stand aside from the

hierarchical machinery of social repression (like Beuys?)—but makes nothing of it. Primitive art, child art, the art of the insane (is that subversive?) have all influenced twentieth-century art. Surrealism employed them all and produced a political programme; the movement which faced head-on the regulating factors in culture is not mentioned. Nowhere does Baynes deal with the formal properties of a work of art; their impact on an audience. This is surprising as well as

The Exploding Cities, By Rosemary Richter and Peter Wilsner, Andre Deutsch £4.25, 0 233 86655 X.
The Dynamics of Urban Change, By Peter F. Smith, Hutchinson Educational £4.45, 0 09 119780 5. Paperback £2.60, 0 09 119781 3.
Garbage Housing, By Martin Pope, Ley, Architectural Press £5.75, 0 85139 240 7.
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Quality, Edited by Environmental Planning, C. B. Wilson, Scottish Academic Press, £4.00, 7011 2032 0.
Environmental Planning: A Political and Philosophical Analysis, By Lincoln Allison, George Allen & Unwin, £3.50, 0 04 329021 3. Paperback £1.80, 0 04 329022 1.

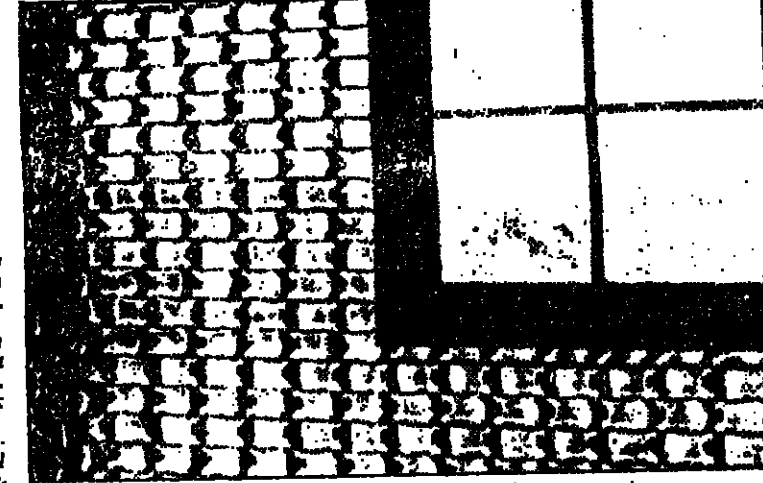
A well-known architect, Walter Segal, was invited last year to address students in the west of England, and afterwards has a letter of appreciation saying "Thank you for not talking about the Modern Movement". A well-known director of planning wrote in a Sunday paper about the undisturbed gains arising from planning policy. Next week's "What's Unspoiled?"

The scene has changed, and the ideologies and shibboleths that have dominated planning and architecture, not to mention housing, since the war, are being challenged not only by the victimised but among the professionals themselves. We are groping for a different way of stating the issues, and the first question one asks is whether or not it takes into account the giant shift that is taking place in our perception of the human habitat.

On a world scale, Peter Wilsner and Rosemary Richter are certainly aware. Their book grew out of the 1974 United Nations *The Sunday Times* Oxford Conference with the same title, but it stands in its own right as they have distilled and amplified the conference material. They discuss first the incredible facts of the growth rate of the world's cities, then the crisis of the rich cities (whose populations are actually shrinking as the wealthy move out to the hinterland), then the cities of the poor, and finally the urban situation of China and the USSR. Their chapters on the rich cities show clearly how planning and housing procedures discriminate against the poor, that planning has become, as Jon Gover Davies put it, "a highly regressive form of indirect taxation". The only rays of hope are in their description of "ad hoc" urban co-operatives in New York.

When they move to the Third World cities, a central place is given to the chapters written for them by John E. Turner and Geoffrey Payne, presenting the squatter settlements that proliferate around every Third World city, not as a terrifying symptom of social malaise, but as a triumph of self-help, overcoming the culture of poverty and its clear, they say, that "the cities the poor build and their 'informal' economies are based on 'lateral' information and decision networks" that are totally different from the vertical and hierarchical organization of large-scale works and services.

"When these centralized systems are used to house the poor, their scale and the limitations of management rule out the essential variety and flexibility of housing options now that it has become the norm in house tenure, it guarantees that the housing 'problem' for the rest of the population will never be solved."



A view from inside the Heineken bottle summer-house

able to use it." In other words, all our assumptions about housing programmes, which have been exported from the rich nations to the poor, turn out in their view, to be based on false promises. And there is growing evidence that this is true. Peter F. Smith discusses a different aspect of the dynamics of urbanism: the light that environmental psychology can throw on urban design. All towns and cities, he says, have their share of "high prestige, low satisfaction urban events". What makes the usual new or rebuilt environment so lacking in satisfaction for the citizen is our ignorance of the art of producing urban excellence in which the spaces between buildings and the uses to which these spaces are put are just as important as the buildings themselves.

Plenty of architectural writers in the past—Camillo Sitte, Raymond Unwin and Gordon Cullen for example—have attempted to identify and classify the elements of urban design. But Smith's special boldness has been to link his excellent photographic survey of these elements with the psychology of perception and with theories of brain function. But he goes further, for he attempts in the last two sections of his book, to formulate a design policy, drawing on the potential for psychological satisfaction behind the very fact of a town or city, and a design strategy which capitalizes on the diverse features of the human mind." This is a stimulating book, full of insights and speculations that will be new to most readers.

Martin Pawley, who a few years ago wrote *Architecture and Housing*, full of stardom and paradoxes, on some thought-provoking half-truths. In the Dutch Antilles, large numbers of people live in climatically unsuitable corrugated metal shacks, the islands are littered with Heineken beer bottles, as it is too far from the brewery in Holland for the bottles to make the usual round trip. Why not market beer in a stubby, squat bottle for a secondary use as a very efficient building brick? Sensible and appealing notions like this seldom get adopted, but this one almost did. Mr Heineken himself commissioned John Habraken, a well-known architect, to design such a bottle, thousands were made as a trial run, and a bottle-house was built in Heineken's garden. But his fellow-directors stepped in to insist that the firm's business was selling beer, not solving the recycling problem by producing packaging with a secondary use, nor in solving the housing problem.

It was a pity, because this was the only time a big firm has even begun to take such ideas seriously. In this country, by 1972 the annual output of one-trip bottles exceeded 450 million, infinitely greater than the annual output of bricks. Pawley encourages the idea with enjoyable ingenuity but gets into a tangle when he links it with another of his preoccupations: that ownership is the biggest single domestic cause of inflation, and now that it has become the norm in house tenure, it guarantees that the housing 'problem' for the rest of the population will never be solved.

Towards a happy habitat

Colin Ward on the arrogance of town planners

final paper, by Dr E. Brooks, of Liverpool, has the endearing title, "Lies, Damn Lies, and Decision-making". For these papers, like the Department of the Environment's current interest in American techniques of what is known as Environmental Impact Assessment, illustrate the tendency attached by Professor Peter Self, to convert genuine political and social issues into bogus technical ones.

For the one thread that draws together this variegated collection of approaches to environmental issues, is the quest for a happy habitat, and the one certainty that emerges is that definitions of that happy habitat are about politics, and Lincoln Allison, in what is, in some ways, the weightiest of these books, attempts to set planning and environmental policy-making in a framework of political and philosophical theory.

Mr Allison sees the dominant ideology of modern planning to be a modified Benthamism: the greatest good of the greatest number. Are there any alternatives? Yes. They include *laissez-faire*, cost benefit analysis with its equation that minimum cost equals maximum utility equals correct decision; the quasi-judicial approach to the public interest through the public inquiry; and Misanthropy or "the market reformed". These are the orthodoxies, and looking for heterodox approaches, he sees J. S. Mill as the unrecognized mentor of the modern radical conservationists, examines the Nazi conservation law, takes a swipe at what he calls environmental Croquetism (a resolutely misunderstanding of the views of Mr Maurice Ash), identifies environmental Rousseauism and

environmental High Toryism. He casts a sceptical eye at the philosophy of participation, concluding that "environmental issues are long-term issues and in the long term it matters only that good and coherent decisions are made, and how they are made".

Finally, before revealing his own conclusions he examines interest groups (those "self-styled pressure groups" which annoy Mr Fraser Reekie) and here his analysis is inadequate and ignores urban issues. In the metropolitan area alone, one can think of half a dozen major environmental decisions which have been overturned by the pressure of outraged citizens. As the last C.I.C. election we had the spectacle of the two parties campaigning on the issue of how much of their bipartisan motorway plans they would let us off in return for our vote. And this party that promised to abandon the lot won.

His final chapter is weak. He opts for conservatism: "I believe that rapid change is generally bad in its effects. 'Change' here includes demographic growth, rapid inflation, and social or political change involving rapid upheavals of role or status." But can we lump such changes together? Conservationism does not mean that we want the environment frozen in some arbitrary status quo. Conservative surgery—the phrase comes from Patrick Gaddes—implies loving care for what is worth keeping and the replacement of what is past redemption. The arrogance of urban planning has been to regard the environment as a *tabula rasa* instead of asking the wearer where the shoe pinches, and then enabling the inhabitants themselves to retain, restore or create a happy habitat.



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A certain tone of voice

Seamus Hegarty on spoken English

Accent, Dialect and the School. By Peter Trudgill. Edward Arnold £19.50. 0 7131 1983 7.

The best one can say about *Accent, Dialect and the School* is that it is an unimpressive contribution to a debate of major importance. The well-publicised failure of some very comprehensive programmes of compensatory education for young children (such as Project Head Start in America) has cast doubt on the underlying rationale. Suppose that the children in question (generally from the depressed socio-economic groups) are not really deficient in language, conceptual skills, etc. but are possessed of different skills, and are made to equal deficits by inflexible demands from the majority culture. Add to this the linguists' belief that all dialects and accents are equal, and you have a recipe for the complete overhaul of our educational system.

The book starts off innocuously

as "a plain man's guide to the true character of accent and dialect", and quotes a laudable sentiment from Bullock: "... We believe that a child's accent should be accepted and that to attempt to suppress it is irrational and neither humane nor necessary." It proceeds, however, to such arrogant nonsense as, when speaking of West Indian children living in this country, whose native dialect is radically different from British English, "There is no reason to teach him to speak British English". We are informed that the dialects of English are sufficiently close for mutual comprehension to reign here (and there) and that changing one dialect is a very difficult task. It would be fascinating to know the evidence for statements of this sort. I do not think I am unique in being acquainted with many people who can switch from standard English to at least one other dialect, or in personally finding many accents nearly incomprehensible, not to mention the dialects associated with them.

The fundamental error in this book is to assume that linguistic arguments can be used to ground

statements about the use and social context of language. Take the linguist's position that all dialects of English, including standard English, are equal. I am not at all sure what this means. In what sense are they equal? Is it in the same sense that chess and draughts are equally games? I am not convinced that one can characterize standard English in purely linguistic terms, and I am certain that, when one talks about the communication capacity of a dialect, one is well beyond the province of the linguist.

One imagines that it is a truism to insist that judgments about language must be interdisciplinary. But apparently not, judging by this book. Not only is the relevance of the neighbouring disciplines rejected, but there is an innocence of them which is truly remarkable. Some of the sociological findings are, to say the kindest thing, unsupported. To imply that psychologists are uninformed about the nature of language and have not carried out any real research is unworthy, while the advice to teachers of West Indian children, that the difficulty in understanding them is due to dialect rather than

pathological factors, and is not matter for a speech therapist, is pathetic; teachers are a little more enlightened than that.

In the normal run of events, one would not take too much notice of a book like this. Much of it is unexceptional, interestingly written, and a salutary antidote to the obsession with standard English which has been a feature of our educational system. (I doubt if this obsession is as potent nowadays as Trudgill imagines.) However, in taking up a position on compensatory education, Trudgill is stepping into an area where incorrect views can do great harm. He is not entitled as a linguist to claim that the notion of "verbal deprivation" is a dangerous myth. As polemical as he should realize that such a tendentious statement needs to be accompanied with a little more evidence.

Towards an Analysis of Discourse is based on an SSRC project investigating the linguistic aspects of teacher/pupil interaction. The conversational scope for extension social classes (for Mandrou, testing its validity on a like sample of his colleagues, because that classes did exist in the twentieth century). Part three deals with "forms of activity" from hunting to humanism, and from science to suicide.

1940—and after

Stuart MacLure on the history of education

A Place for Everyone. By Nigel Middleton and Sophia Weitzman. Gollancz £7.50. 0 575 02028 8.

There must be a limit to the number of general histories of the English education system which the market will stand, but evidently it has not yet been reached; indeed, the reduction in the length of time which government archives remain closed from 50 to 30 years, means that historical research skills can now be applied to more recent periods of the administrative and policy record. Last year, Professor Brian Simon's book on *The History of Educational Reform, 1920-1940* gave close examination to the inter-war years. Now Nigel Middleton, using the unpublished manuscripts of the late Sophia Weitzman as an associated source, has looked in depth at the war-time period, or rather, at one aspect of the history of education during the Second World War, namely the preparation of the 1944 Education Act.

According to the opening chapter, the book is meant to explore "the development of educational opportunities for the children of ordinary families, those with no notable wealth or position" but the only way in which this estimable aim is apparent is in the meagre tone

and partisan judgments which make it disconcerting, particularly in the earlier and later parts.

No reader should be deceived: this is another general history of the education system, less elegantly written than Lawndes, and drawing on more recently available material, but offering few new insights into the education of "the children of ordinary families". Somehow Mr Middleton's prejudices and partisan ship are worn less lightly than Professor Simon's. Nobody is left in any doubt of Professor Simon's angle of vision; but he could never have brought himself to write, as history, the sketchy and imbalanced account of 1946 to 1972 which Mr Middleton has vouchsafed.

If the first part of the book is dull but relatively unobjectionable, the middle 100 pages which deal with 1940 to 1944 are full of interest. Here, too, you have to put up with Mr Middleton's sweeping generalizations about the politics of the time, but he has done everybody a service by reprinting, for the first time the Green Book, circulated confidentially by the Ministry of Education in 1941, which provided the substance on which the subsequent negotiations were based. The important part played by the first Lord Soubury is brought out

Professional sang-froid

Michael Marland

Maintaining Discipline in Classroom Instruction. By W. J. Gagey. Coffer Macmillan £12.50. 0 234 4160 7.

It is good that a book can be written and published on such an important topic as this. Our highest aims and ideals in schools still depend just as much as they used to on "classroom discipline", but few effective practitioners are willing to analyse their methods; indeed, many of the chief professional skills by denying that they do anything special. A number of American educational psychologists, however, have given their minds (aided by substantial research funds) to trying to make tangible the apparently intangible subject of classroom discipline. Gagey himself is one of them; but researchers such as Clarke and Glasser, and above all, Jacob S. Kounin, have contributed substantial work of real help to professional classroom teachers.

In this slim booklet, Gagey sums up briefly and clearly the findings. Chapters two ("Preventing Class-

room Misbehaviour"), three ("Controlling Deviants Directly"), and four ("Controlling Deviants by Proxy") are the most useful. He writes openly of the difficulties encountered in what we should call top junior and younger secondary classes, and the advice is sound, though hardly complete. He is apparently concerned predominantly with full-class teaching. Although I maintain that a substantial part of group or individual work, Gagey is right to concentrate on the full class, for this is where the difficulties lie, and, paradoxically, the sequences of full-class teaching that are retained in any pupil-oriented individual work lesson are of crucial importance to the success of the whole lesson.

The United States jargon may be off-putting, but it is helpful in defining and highlighting teaching procedures that otherwise are difficult to discuss. Kounin talks about "smooth transitions" and argues that the changing of activity needs special care—a point that I notice weekly in one of the best parts of professional teaching skill, and

yet is barely discussed in educational literature. The "lesson movement" and "ripple effects" are more obvious terms, but "dangles" and "anchors" are the oddest. I found the work especially valuable in preparing my own *Classroom Management*. The book is well written, and the summaries, for brevity's sake, are research on the subject. The last part, on the practical application of the theory, is well written, and the book is a good read. It is a pity that the book is so small, and that it is so expensive. It is a pity that the book is so small, and that it is so expensive. It is a pity that the book is so small, and that it is so expensive.

Triptych of an Age

Peter Burke on early modern France

Introduction to Modern France, 1500-1640: an essay in historical psychology. By Robert Mandrou. Gollancz £9.95. 0 7131 5778 X.

Robert Mandrou has written an introduction to the history of France of speech, its use rather than the battle of Pavia (1525), and one with the treaty of Cateau-Cambrésis (1559), like a more precise massacre of St Bartholomew or Hully's grammar course reforms of Cardinal Richelieu. It is hierarchical, complex, is to be congratulated, for he ranks — lesson, transference as instead the portrait of a change, move and act. He, or rather a triptych, for his explained in some detail, is divided into three.

The system of analysis, a "human dimensions", the interested reader should apply the system to his own body and mind; food, material. It should be wealth, emotions, conceptions, that, with the exception of time. Part two, "the son", the components of social context, describes the difference between the family, the parish and the state. The scope for extension social classes (for Mandrou, testing its validity on a like sample of his colleagues, because that classes did exist in the twentieth century). Part three deals with "forms of activity" from hunting to humanism, and from science to suicide.

The point of this essay in "historical psychology" is a simple and fundamental one. If we in the twentieth century wish to understand the Frenchman who lived some 500 years ago, we need to begin by contemplating the differences between the Frenchman and us, especially the difference in the Greek cities in attitude.

More important than the revision of detail is the question whether the synthesis, viewed as a whole, is a success. It is a brilliant idea, unevenly executed. Some chapters are bold and arresting, others — on the monarchy, and on artists, somewhat flat and conven-

argued tirelessly for "a new kind of history", which would deal with structures as well as events, and with every kind of human activity. Written by a pupil of Febvre's, and based in part upon a plan found among his papers, this book attempts the reinterpretation of French history for which Febvre never found the time.

It is a measure of the posthumous success of Febvre and his friend Marc Bloch that this book of Mandrou's, first published in 1961, no longer seems as unusual as it did 15 years ago. Topics it once seemed audacious even to mention, are now an accepted part of historical research. Demographic history? Where there were a few monographs in 1961, there is a mass of work today. Popular culture? We now have Mikhail Bakhtin's exploration of the humour of Carnival, and the essays of Natalie Davies (recently collected into her *Society and Culture in Early Modern France*), not to mention Mandrou's own later work on French chaplains and the subject now. In some cases, notably that of demography, recent research has modified Mandrou's generalizations. It is a pity that he has not seen fit, in the second edition from which this translation has been made, to modify his text or bring the bibliography up to date.

More important than the revision of detail is the question whether the synthesis, viewed as a whole, is a success. It is a brilliant idea, unevenly executed. Some chapters are bold and arresting, others — on the monarchy, and on artists, somewhat flat and conven-

Shifting sands

John Gretton on the Spanish Sahara

The Spanish Sahara. By John Mercer. Macmillan £8.25. 0 04 20113 6.

It is the interest of the treatment of the territory of the Sahara, which contrasts so sharply with the rest of the world, that makes this book a success. It is a book which, in spite of the fact that it was written in 1951 when the Sahara was still a French territory, is still relevant. It is a book which, in spite of the fact that it was written in 1951 when the Sahara was still a French territory, is still relevant. It is a book which, in spite of the fact that it was written in 1951 when the Sahara was still a French territory, is still relevant.

better informed (as is all too often the case with foreign reporting, the French press, in particular, was streets ahead of ours). As it is, however, given the state of our knowledge of the political and economic situation, it is a pity that the author's approach is a bit of a pity.

The author's approach is a bit of a pity. This is not in itself a bad thing. It is the approach of the early geographers, to whom Mr Mercer bears a certain likeness. He knows about geology, so there is a forbidding first chapter on that, full of terms which make the general reader stumble. If they don't put him off completely, he has travelled quite widely in the country, observed closely what he has seen, and written down from the gaps in his knowledge. Some of the gaps are filled in from secondary sources. But the result is very uneven.

The lack of even the most basic familiarity with the social sciences shows up in his treatment of social structures and customs, particularly when compared with his account of pre-history which is, if anything, over-informed by his archaeological knowledge. And the business shows stylistically in his awkward use of transitional colloquialisms, such as "coming now to...", "turning to...", "moving on to..." and so on.

The most serious gaps, though, are economic ones. There is very little on social and economic exchanges, either between individuals or between groups. One does not have to be a Marxist to see that the fundamental economic transformation of the desert must be having a profound effect on the social and economic life of the Saharans. But where do we find, say, even a comparison between the cost of running a camel and a Land-Rover? (The Land-Rover is slightly cheaper to run, if not to buy.) And the pressures on the Saharans by their neighbours make little sense without some account of the economic motives behind these pressures.

Not only the best book on the Spanish Sahara we have; it is a good and useful one. Would that there were more like it on similar little-known corners of the globe.

Alchemist of words

Hilary Finch on William Caxton

William Caxton: The First English Editor. By Richard Doonan. Miffler £6.50. 0 584 10022 1.



On December 13, 1476, a letter of indulgence from the Abbey of Abingdon to Henry Langley and his wife was printed in Westminster. This year, that event is being commemorated as the 500th anniversary of the beginning of printing, and the beginning of a wider understanding of the English language, religion, laws and culture.

Richard Doonan reconstructs Caxton's life from the prologues and epilogues to the books he printed, always distinguishing clearly between fact and speculation, and what emerges is a thoughtful and thorough account of Caxton's rise from apprentice cloth-merchant to printer to the English court. After his apprenticeship, Caxton went to Bruges as a merchant venturer, then through a relentless pursuit of public duty and private interest, he gained sufficient knowledge and confidence to set up his press in England. Caxton will probably always be remembered primarily as a printer. But his constant striving to embellish and improve the English language—to shape it with the elegant nuances of French and Latin—was undoubtedly, for him, the purpose behind it all.

In Europe, linguistic changes had preceded the appearance of the press, but in England, printing had to fix the orthography of the language. In spite of his nostalgia for the literature of the Middle Ages, Caxton was a ruthless editor of Chaucer and of Malory; his work in this field makes a fascinating study in itself.

"Caxton was a man in a hurry", Mr Doonan writes. "He was a printer at war, firmly keeping his attention on the main task of propagating the English language in print. His war was against the forces of indolence, reaction, suspicion and indifference, against all who failed to realize that in the whole of Europe there was no language which was so unprogressive or crude as the conglomeration of dialects and primitive phraseology which passed under the euphemism of Middle English."

Humdrum hero

Pierre Watter

The Rebel on the Bridge. By Glenn Barratt. Paul Elek £12.00. 0 236 31015 1.

The Decembrists, though perhaps not quite so heroic as they are made to seem in later hagiographic accounts were, for the time, men of unusual character and libertarian convictions. Rosen, the subject of this biography, was of their number only momentarily and not by any intense conviction. He belonged to that unfortunate class of men who are by temperament incapable of being other than lukewarm. Barratt does his best for him, but cannot show him as other than cold, calculating, precise, and, in all he did, the personification of routine.

A gifted man, nevertheless, his measure was taken by his results. Rosen, unable to throw himself into the Decembrist adventure, boots and all, became the most accurate of all sympathetic observers and recorders. His account, according to Barratt, remains still the one virtually unimpeachable source of information by a contemporary. Rosen's inelegant and qualified involvement in the events of December, 1825, cost him dear: 10 years' hard labour, later reduced to six, and exile in Siberia, which ended, by the grace of the Emperor Nicholas (who had originally ordered it in perpetuity) in 1839.

Barratt's study is pertinaciously subjective. Not a grain of sand is left unturned that might contribute a scintilla of information, factual or conjectural, to this lost part of the model of Stierne's "world: it might be 12.2, etc.—which adds bulk without substance). The style suits the subject: humourless, repetitive and heavy. The work is a biographical alexandrine that "drags its slow length along. For those greatly interested in the by-ways of Russian history it will, doubtless, make rewarding ploughing; but for others its very comprehensiveness will be an obstacle which the price will not tempt them to overcome. For what the work yields, it seems excessive.

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In this slim booklet, Gagey sums up briefly and clearly the findings. Chapters two ("Preventing Class-

28 Resources

Big noise in the Black Country

FRANCES FARRER on a tumultuous fortnight at a village school.

The village of Streetly looks like a vast 1950s housing estate. It is a dormitory for Walsall and Birmingham, with two modern shopping centres, a pub and an irregular country bus service. It also has a school called Blackwood Middle School. For a fortnight in January the school put on an exhibition, *Sounds 76*, and attracted musicians, poets, writers and lecturers, demonstrated a synthesizer, quadruphonics, a telephone switchboard, talked of acoustics, deafness and dialect, and established Blackwood school radio station, call sign GB3 BMS, transmitting from a 60ft mast outside the crafts room.

An improbable setting for such an enterprising programme perhaps; as so often the explanation lies with an imaginative head, in this case John Gibbs, and a tireless organizer, Brian Holmes. They hope it will "encourage children to do far more talking and far more listening... about almost any experience and feeling... not just on a chatter level."

The events were fitted in around a timetable which retained basic mathematics and French teaching as far as possible, relying on the exhibition to supply music and language. Blackwood's 580 pupils are divided into four year-units and each unit got to about 32 events. The children had some preparation for the programme during the first week of term, and did a little follow-up work during the fortnight. Activities resulting from the exhibition are expected to last at least half a term "although they'll remember some of it a lot longer."

I stayed for the first two hectic days, just long enough to catch the enthusiasm and excitement generated not only among the children but also among the staff. Such an undertaking demands a fabulous amount of organization even up to the last minute, when there are cancellations, equipment breakdowns or room changes. The staff remained keen throughout these constant rearrangements. Brian Holmes hovered everywhere, overcoming difficulties and soothing frayed nerves.

Percy Edwards started the whole thing off with an hour or so of his famous sound impressions, introduced by colourful descriptions of country life. He produced a wide variety of bird calls of which the children recognized an impressive number. He also did a few cottage sounds—treadle sewing machine, kettle, grandfather clock. When request time came he was asked for a vulture, a frog and a mynah bird. Mr Edwards maintains optimistically that "anybody can imitate any sound if only they listen." Finally he was besieged by autograph hunters. Autograph books, in fact, rapidly became quite a feature and were presented to anyone from outside.

Poetry and music played perhaps the largest part in *Sounds 76*, sometimes together. The Incredible

Bob Cobbing gave several sessions of sound poetry, backed by David Toop and Paul Barwell on "new and rediscovered musical instruments."

Cobbing's gravelly intonations of syllable poems bewildered the children at first but they gamely joined in chanting "ana ana a nae" and "ana tan a tan", giggling the while. They were intrigued by the home-made wind and percussion instruments, many of which had been inspired by non-European musical cultures and certainly looked and sounded alien enough.

Question time was a challenge for Bob Cobbing, including such poses as "Do you write any in English?" "Do you have any other hobbies?" and "How long does it take you to think up one of, er... those?" However the children had so far got onto the Cobbing wavelength that, faced with the printed poem (read in columns),

Wan Siphon
Do Bat
Tree Neighing
Fear Den
Life Elephant
Sneaks Twirl

they immediately saw it was phonetic numerals, which many adults had misread.

Participation in creating poetry was led by Betty Mulcahy. During a preliminary session, she discussed expression, getting the children to show pity, delight, discovery, disappointment and mystery simply by saying "ah".

Ms Mulcahy has a lively, direct approach which catches and holds attention. For the exhibition she demonstrated sound poems. Children were encouraged to write for themselves, although Ms Mulcahy feels there may be too much emphasis on creativity, that children's own vocabulary can be limiting and that they should be stretched by studying more complicated language.

The Liverpool poet, Gareth Owen, gave straightforward readings of his own work for children. A few poems were rather dated, most were wry, vigorous evocations of childhood—school, fights, home, football, heroes, enemies, best friends. Gareth Owen counts well and his poems held 40 nine-year-olds for three quarters of an hour, which must be a measure of success.

Alongside the professionals, some contributors to *Sounds 76* were enthusiastic amateurs. They were mostly local people and gave an element of informality. Ray Williams, a sales rep, showed part of his collection of old phonographs and musical boxes which he bravely left on display, with printed notes.

Roy Lehrle, a lecturer in chemistry at Birmingham University, demonstrated Hungarian literature, linking traditional folk music with that of Bartok and Kodaly. Although his slides were poor, his tapes were excellent and had the



Roy Lehrle demonstrates the instruments used in Hungarian folk music, and Kodaly.

children swaying and tapping their feet. We heard a recording of a leaf being played in the blade of grass fashion to demonstrate how a reed works.

Bob Turner, who manages a boatyard, offered a talk on canals of the West Midlands with excellent visual material and barge's songs.

Music had many exponents in different corners of the school. Roy Jacob supervised the making of steel drums, while in the crafts room Max Eadeley and Hugh Davis directed the children in the construction of simple wind instruments. The girls made lethal looking ball rovers, the boys clarinets. The Davis/Eadeley/Toop/Burwell exhibition of now and rediscovered instruments had been brought from the Scottish National Gallery of Modern Art, where it had met with mixed reactions. Amazing constructions of springs, board, wire and amplification with names like Shoop and Lazy Garlic demonstrated at least that the definition of music and musical instruments can be expanded almost without limit.

Children are very receptive to experiment and they were excited with Ken Gray's sound activated mobiles. A favourite experiment involved holding hands to form a circuit, a very tiny electric current being passed in. Somehow Ken Gray created different sounds by touching each child in the ring.

More traditional, Norman Price gave a talk on the history of music. This ended with a brief demonstration of the theory of composition, the principles of balance and design. He was talking to a selected group of very musical children, whose preparation and follow-up work will have reinforced his discussion.

Although all the school attended some events, smaller groups were often chosen for others. Children were given some choice but teachers took the final decisions about what they saw what Brian Holmes had envisaged a great deal more vertical streaming but the staff felt this was impractical. Some staff also thought

there was too much going on for the children to take in. Brian Holmes defended quantity on the grounds of quality: "We can attract a better cross-section of outside speakers in a collective event of this kind. Even so there was some unevenness."

Speakers and subjects were chosen after consultation with inspectors, the local authority and the Midlands Arts Association, and suggestions from parents and staff. The money (about £1,000) came from the L.A., the M.A.A., parents, the school fund and from the Parents Association and Writers in Schools. Some contributors gave their services free, others were paid from families. Local firms also helped with displays. The post office installed an internal switchboard which the children quickly mastered.

The events mentioned so far took place during the first two days of *Sounds 76* and therefore represent about a fifth of the total programme. In addition there were static displays, including an electronic organ, quadruphonics sound, ultrasonic sound systems, burglar alarms and a call equipment. On other days there were new plays, poetry (Edward Lowbury, Morris), a one-man band, a steel band, a brass band and folk songs (Alison McMorland), some from the Black Country (John Raven).

There were talks on sound effects, sounds in magic early music, instruments, composing music, history of broadcasting, canal sounds, noise pollution, language growth, impaired hearing. There were concerts and films. And this list is not comprehensive.

It is probably impossible to measure the effects of a programme like *Sounds 76*, even several months in retrospect. Phrases like "educating for life" and "developing creativity" fly around, while critics complain about over-excitement and saturation. One can only hope, with Brian Holmes, that they've set on fire by what they've seen", and doff one's hat to the sheer ambition of the programme.

Wise buys and shoppers' rights

by Di Griffith

Thinking About Shopping is a pack issued by the Office of Trading. These packs have sent free to 20,000 schools in the United Kingdom but schools have not received a free copy. They would like further copies from them from the Central Office of Information, Publication and Services Division, Herndon, London SE1 7DU.

Thinking About Shopping is a six illustrated leaflet: "We buy?" (different types of goods and methods of shopping); "Rights and shoppers' rights"; "Why do we buy?" (wants, influences, advertising, marketing); "Which one to buy?" (labels and marks, money, packaging, shop, comparative testing); "How we pay?" (prices, buying, borrowing); "Who can we buy?" (local and national); "What else should we buy?" (pollution, recycling, sharing resources); a teacher's booklet which contains the suggestions and ideas in worksheets.

These worksheets are clearly presented, and are designed. The illustrations, and comic strips are funny and children will have material. The vocabulary is without being patronizing, and are plenty of suggestions for follow-up work. Examples of how to use the worksheets are given, so that material collected by the child can be easily collated and displayed.

The teacher's booklet is a further information, suggestions of places to visit, for both teacher and pupil, to and helpful ideas for art and craft work.

Altogether a useful pack or use, stimulating to look at and worth sending for.

Catalogue

The new Gateway Educational Media catalogue is now giving details of all their products. Nearly 1,000 film titles are listed, as well as books, cassettes, charts, kits, learning packages, and visual equipment. Some of the items are from the range of BSL Bristol Group of which Gateway is a member.

The Gateway catalogue is available from Gateway Educational Media, St Lawrence House, Broad Street, Bristol BS1 2JL.

Smiling computer

From the American Mars programme with shades of Dr Who has sprung E. J. Arnold's new classroom computer. It is called the Digitor and if it does not appeal to educationists it should have a runaway success as an executive toy.

The Digitor presents simple arithmetical questions which the pupil answers on the keyboard. The correct answer is always shown on the screen. If the child is right, a jolly green face lights up. If wrong, a red frowning one appears and the question is repeated until the pupil answers correctly. If he gets 10 out of 10 (or all correct of however many are set) the green face flashes joyfully on and off.

Number groups of 0 to 3, 4 to 6, 7 to 9 and 0 to 9 can be selected for addition, subtraction, multiplication or division. The Digitor



presents problems at random according to the makers, avoids sequence learning. Further information from E. J. Arnold & Son Ltd, Butterley, Leicestershire LE16 10.

29 Resources

Making tracks

by Bryan Waltes

An Environmental Experience Observe and Record. By Derek Waters. ILEA Media Resources Centre, Highbury Station Road, Islington, London N1 1SB. £1.50 for ILEA institutions. £2.20 others.

This well-produced and artistically-designed book is an attractive record of a school journey to the Forest of Dean in 1973. Thirty-eight boys and girls, fourth year juniors from Boxgrove School, London, went with their teachers on a 10-day visit and their work was based on the forest, river, mining and birdlife.

Useful activity charts are given with well-thought-out objectives for the excursion. Teachers will find the flow charts on the forest, river and birds a good summary of possible work on these topics.

General resources for the topics are given but not specific references for the use in terms of OS map sheets, numbers, memoirs, guides, local papers, documents and planning/conservation material. This would give precise help to teachers intending to visit the actual area.

Better indication of how the whole visit programme fitted into curriculum development in the school is needed especially as current financial economies will make them more difficult to justify.

Examples of work cards used in preparation and a work brochure used in fieldwork are excellent and very full explanation of preparation and follow-up to the visit is given. But more on what actually happened in the field, reactions on the spot (not several weeks later), the standard of the set tasks and the real value of these activities in terms of retention and comprehensive-ness would have been welcome.

Certainly the follow-up seems impressive: a 35-minute sound programme was prepared supported by slides and OHTs sequences. An exhibition with models, maps, music, rubbings, creative writing, pictures, friezes, photographs, etc, was successfully mounted.

All this represents an enjoyable experience for pupils and teachers as well as parents. It also shows how pupils and teachers can cooperate effectively with a resource centre and outside experts.

Environmental Experience provides a model for primary school teachers embarking on a field visit. Indeed, it is essential reading for secondary school teachers and college lecturers. It not only reminds of the detailed preparation and follow-up for such visits but, more important, it conveys a freshness and inspiration easily forgotten.

Holiday snapshots

Czechoslovakia: Slovakia and Moravia, Bohemia, Audio-Visual Productions, 15 Temple Shoen Road, London SW14 7PY. £4.50 each.

These two sets of 24 slides would be classified by most as geographical although they are not specifically so named. The notes certainly mentioned geographical matters. There is, however, no theme or regional coherence, and the slides look remarkably like the pictures of a well-informed holidaymaker with an interest in architecture would bring back from his tour of the country.

Of the 24 slides on Bohemia, 19 are of houses, large buildings or towns. The notes underline, in their irrelevance, the paucity of geographical material, often giving bald economic or historical facts not visible in the pictures. There are a few interesting broad landscapes which could illustrate land use and related studies.

Above all, there is an absence of human material—of people active in places. This suggests an ignorance of what is actually in the classroom remarkable in these days.

B. S. Robertson

Tapping the unusual sources

by Deborah Thom

Britain from Waterloo to the Great Exhibition. Heinemann Educational History Broadshets. £1.65.

The justification for yet another set of worksheets in this area of social history can only lie in innovations in both style and subject matter. In this instance the compilers, from different educational institutions in the Glasgow area, have limited the years covered to focus on questions which are interesting to all students of history, not just the examining boards.

Their material comes from unusual sources, notably some from Scotland which supplement the more familiar bluebooks of those reforming years. The selection of quotations is never bland. They do not evade the issues and frequently give an exciting taste of the polemics of the day. Even the Irish Question which has been so ill-served by the textbooks has three worksheets.



A typical first-class carriage interior on the London and North Western Railway. From a broadsheet entitled "A New Transport System".

In matters of style there is one major improvement on similar collections. The pictures are excellent, some of them fresh to even the most jaded teacher of history, others more familiar; but all are used to complement the extensive quotations and to elicit critical thought.

The text is fitted densely around them and use is made of several different type styles to distinguish quoting from narrative and questions. The major fault in the collection lies in the questions provided at the end of the worksheets. Several rely on a far greater knowledge than is accessible from the material. In fact they need the compiler's knowledge. On most of the 22 sheets this is not a serious fault, but on a few it would mount using the sheer revision only. Still, there is much else that is excellent and the set would provide a valuable addition to resources for any CSE or O level course.

Industrial processes for sixth forms

BP have brought out a teachers' handbook, *Industrial Processes for Sixth Form Chemistry*, which covers nine projects on process: from the chemical, plastics and oil industries. The idea is to introduce "an element of industrial chemistry into the work done in the sixth form" and BP consider that many of the experiments can be used to complement A-level syllabuses, particularly JMB Chemistry Syllabus A and the Muffield physical science course.

Projects include analysis of an oil fraction, preparation and testing of an epoxy resin, separation of straight chain alkanes from hydrocarbon mixtures, and water content of polymers. The book was compiled by M. J. Tomlinson, of Ashby Grammar School, and D. J. Daniels, of the Bath University School of Education.

Industrial Processes for Sixth Form Chemistry costs 45p from BP Educational Service, PO Box 5, Welbury, Yorkshire.

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Testing, testing

John Tranter continues our series of articles commissioned by Chelsea College Centre for Science Education

Analytical tests for biology and chemistry

Quantab: Chloride titrator 1175 0.005 per cent to 0.2 per cent. Chloride titrator 1176 0.03 per cent to 1 per cent. Chloride titrator 1177 0.4 per cent to 12 per cent. £6.25 the bottle of 50. Quantab: CI test strips, £2.30 the box of 100. DT test strips, £2.30 the box of 100. RC tablets, three standard droppers and six tubes, £1.40 for 50 tests. Accessories are available. Booklet "Quantab and Quantab for Education in Science", one copy free to science departments, Philip Harris Biological Ltd, Oldmixon, Weston Super Mare, Avon BS24 9BJ.

New from Miles Laboratories Ltd, is a range of analytical tests that can be used in many ways in biology and chemistry teaching. Quantab and Quantab are rapid and simple tests for estimating such substances as glucose, hydrogen peroxide, proteins, reducing sugars, salt and many others. The tests are available from Philip Harris Biological Ltd, the educational agents for Miles Laboratories.

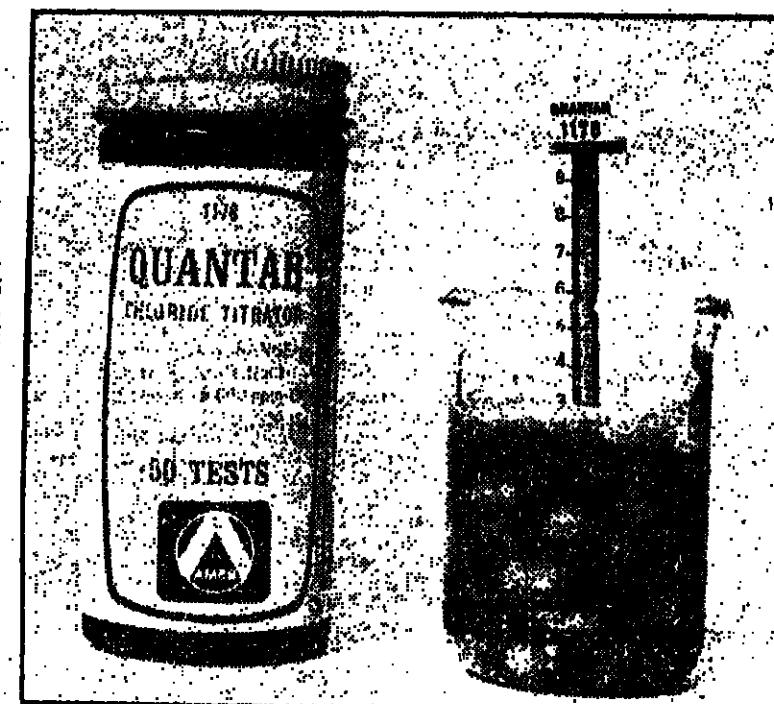
Two of the Quantab range—the CI and DT tests—use plastic strips which have at one end a small square of cellulose impregnated with reagents. The third test—Quantab RC—is in tablet form. These three tests are read by comparison with charts of eight colour blocks identified by letters. The Quantab tests are a range of three chloride "titrators" of different sensitivities for the measurement of sodium chloride levels. They have a numerical scale against which readings are made. The Quantab titrators are already fully calibrated for quantitative estimations of salt. The Quantab tests, however, first need to be calibrated against concentration ranges of known substances. If anything other than qualitative comparisons are to be made.

Soil test kit

The Soil Test Kit Model D, from Sudbury Technical Products, Upper Birchetts, Langton, Groom, Timbridge Wells, Kent TN3 0BE, and other scientific suppliers. The recommended retail price is £3.30 plus VAT. Replacement accessories and chemicals: Colour charts, 0.27p; Set of 4 test tubes with caps, 0.12p; 7in stirring rod, 0.14p; 100mg pipettes, 0.11p; Bottles of chemical solutions, 0.42p—all prices inclusive of VAT and postage and packing.

Sudbury Technical Products Ltd manufacture a number of kits to enable tests to be carried out on soil samples for lime (pH), nitrogen, phosphorus and potassium. These kits include Models A and B (for farmers and growers) and Model D (for home gardeners). All kits use the same methods of testing, but Models A and B are larger and contain equipment and materials for performing larger numbers of tests. The home gardeners' kit D was the one selected for testing. (See photograph.)

The kit contains five 15 cm bottles of the test solutions—each with its own dropper pipette. There is one solution for the pH, nitrogen and phosphorus tests and two for the potassium test, with sufficient chemicals for about 40 tests. In addition there is a pure 2.5N stirring rod for use in the phosphorus test and four small glass test tubes, each with a colour-coded cork stopper. Full instructions and colour charts are included for performing



An important feature of all the tests is their convenience and simplicity which make them particularly useful where laboratory facilities or technical staff are limited, when preparation time has to be kept to a minimum, and for work by students at home or on field courses.

To carry out the Quantab strip tests—CI and DT—the strips are dipped in the sample, removed (immediately for DT and after two seconds for CI), excess liquid is shaken off and the colour that develops in the impregnated end compared with those on the standard colour charts—either immediately, or after, say, 30 seconds.

For the Quantab RC test—which takes up to two minutes to perform—a measured number of drops of the sample and of water are added to one of the test tubes using a standard dropper pipette. An RC tablet is added to the sample, and finally the colour change that the tablet's reaction produces is matched against the RC colour chart.



the tests, plus information to enable calculation of the correct amount of fertilizer to be added to the soil if it is shown to be deficient in any of the minerals.

What chemical reactions do the four soil tests involve? For obvious commercial reasons, Sudbury will not disclose the formulas of the reagents used in the tests, and so it is not possible to give full details of the nature of each test. The lime (pH) test uses a dark-green solution which looks remarkably like RDI soil pH indicator and

with an iodide chromogen system. In addition to glucose and hydrogen peroxide, the CI test will also work with sodium hypochlorite, potassium permanganate and substances which liberate hydrogen peroxide.

The Quantab DT test is based on the effect that some substances have of displacing the pH range over which the colour change of certain acid-base indicators takes place (the so-called protein error of indicators). A wide variety of substances will react with Quantab DT. These include proteins, some polypeptides and amino acids, plus quaternary ammonium compounds, but the test's sensitivity varies in degree quite widely for these various substances.

The reaction with Quantab RC tablets is self-heating and involves the reduction of copper sulphate by certain reducing agents in hot alkaline solution. Substances detected by the RC test include reducing sugars, ascorbic acid, formaldehyde and hydrazine compounds.

The Quantab tests have expiry dates printed on the boxes which should be observed. All the products can be expected to have lives of more than one year, and considerably longer in the case of Quantab DT and RC and the Quantab titrators.

A descriptive booklet *Quantab and Quantab for Education and Science* (single copies are available free to teachers) has been produced which gives detailed information on the chemistry of the tests and their calibration.

The booklet also suggests a large number of experiments in biology and chemistry in which the various tests can be used. They can be introduced either as convenient tools, or as practical examples of applied chemistry. Applications of the Quantab and Quantab range include:

- Tests on foods and drinks for reducing sugars, proteins and salt.
- Experiments on the hydrolysis of sucrose and starch.
- Studies of catalase activity in plants and the breakdown of hydrogen peroxide.
- Experiments on enzyme and yeast activity.
- Experiments on diffusion through membranes.
- Investigations into the buffering effects of acid/salt mixtures.

micro-organisms to lower the levels of certain agents present in the soil. It is these (undisclosed) substances that react with the two potassium test solutions to produce an orange-red colour if they are abundant.

The phosphorus test is, however, a direct one and involves the reaction of soil phosphates with acidified ammonium molybdate solution under reducing conditions. A blue colouration is obtained by reaction with metallic tin after stirring with the reagent provided. The intensity of the blue colour obtained is a measure of the amount of phosphorus present.

The instructions for carrying out each test are simple and easy to follow. Several precautions are emphasized that must be observed if the results obtained are to be reliable.

The test tube markings show the quarter, three eighths and half-full positions, which, together with the pipette droppers with each bottle, make additions of measured amounts of soil and solutions an easy task. However, the dropper bottles and it is infuriating to be unable to use the last half of all the solutions without tipping them into other containers.

Readings are obtained after mixing by matching the colours of the solutions against those on one of four colour charts. Readings are in pH units for the lime test and deficiency four tests—so no quantitative measurements of the actual levels of the three minerals are possible.

Colour matching with all four charts was not always particularly

- Examination of householding agents for oxidizing agents and quaternary ammonium compounds.
- Experiments on the proper and reactions of aldehydes.
- Demonstration of the effect of fruit by testing for glucose.
- Studies on the salinity of waters and rock pools.

The Quantab tests are quick to perform. With the Quantab CI test, a positive result is as a colour change from blue through green to brown, and standard time intervals—seconds—between removing the strip from the solution and reading it. The "dipping" time is critical; if they are with too quickly, penetration of reagent may be incomplete.

In such cases a brown colour develops first round the edge of the green before spreading inwards, or a mottled green/brown pattern may be traced back to the early observed, colour matching is difficult.

The fieldwork was carried out in three phases, with an initial sample of 2,000 pupils—when they were between 13 and 15 years old and making certain readings when they had reached the first year of secondary education.

The pupils were asked to make readings of their preferences for school subjects at that time; these responses were later compared with their actual choices of A level courses at the sixth-form stage.

The Quantab chloride test could not be simpler to use. Earlier research has suggested that the concentration of sodium chloride in the blood is a good indicator of the concentration of sodium chloride in the blood.

It seems unlikely, for one reason, that the Quantab test, particularly the Quantab RC test, will be used in classes of 10 or more pupils. It would be easy to use a bottle of titrator or a box of tablets in a single lesson with a group. There are, however, a number of ways in which the test could help to make an investigation very much easier (and small amounts of reducing sugar or making measurements of salt in marine field courses), in particular, showed a strong early interest in the more rigorous science subjects. Four-fifths of the eventual science specialization group stated an early preference for physics, chemistry or mathematics.

The arts specialists, while noticeably biased in favour of arts subjects (two-thirds stated these as favourite subjects), were somewhat more diffuse in their preferences, although this was more true in the case of the boys than the girls.

While both of the science groups' preferences were concentrated in the science area, the science and science/biology specialists exhibited different patterns of preference within this. Already at 13 more than a quarter of the future science/biology specialists reported a preference for biology over physical

science. On all charts there was a slight bias in favour of biology, after allowing plenty of time for the particles to settle (and in clay soils this is never complete). It was impossible to make any colour comparisons in the case of the phosphorus test. This could make a difference of 10 per cent or more in the results.

The instructions for the phosphorus test indicate that a blue-green colour can be obtained. However, on the chart, only various shades of blue are shown. A blue-green colour can be obtained, but it is not possible to compare it with the chart. It is not possible to obtain a blue-green colour which can be compared with the chart.

Because of the nature of the test, it will not give valid results when used directly on the soil. It is not possible to obtain a blue-green colour which can be compared with the chart.

Specialised interests

Judy Bradley and Christine Meredith

Ideas, argument, experiences, research

science, while only 10 per cent reported a liking for mathematics, as opposed to 28 per cent of the physical scientists. The mixed "specialists" at 13 were almost equally divided in their preferences between the arts and sciences.

These findings could be interpreted in two ways. In a system where specialization begins early—immediately after the third form as was found in studies undertaken in the 1960s—there would be an obvious and not very interesting correlation between third-form interests and A-level courses in the sixth form.

Where specialization is delayed, the correlation would indicate that sixth-form specialization is based to a considerable extent on early and enduring interests, rather than temporary, perhaps irrational ones as might be the case in the first situation. The latter situation seems to be closer to the one under investigation.

In the 1970s there appears to be a tendency towards discouraging early specialization, encouraging pupils to carry a wide range of subjects for as long as possible. It would seem that, independent of the school's system of subject options, the process of specialization, of self-selection, does none the less begin early as a result of factors which are, perhaps, outside the school's control.

Further analyses carried out as part of the main study suggest that patterns of interest, ability and personality largely determine sixth-form specialization. This data should not, however, be taken to mean that the issue of early or late specialization is irrelevant.

The correlations, though significant, were by no means perfect. Small but noticeable groups of arts and science specialists expressed opposite preferences at 13 to their ultimate sixth-form choices. In addition, it was noted that those pupils following mixed courses have, in contrast to the arts and science specialists, a much wider range of preferences.

Neither do this group conform to the early "specialist" patterns of ability, interest and personality. National figures indicate a considerable increase in the proportion of mixed A level courses being taken between the mid-1960s and the present (from 13 per cent to 20 per cent), which seems to run parallel to the trend towards later specialization.

It seems probable in the case of this group that early specialization could lead to later dissatisfaction, whereas the present situation leaves them with a greater range of options until the end of their schooling.

Judy Bradley belongs to the Oxford Pre-school Research Group. Christine Meredith is a research student.

TALKBACK

Down with all flags!

Richard Nicholson

The current troubles in the William Tyndale School throw light on a phenomenon which bedevils education today. I feel increasingly it affects other areas as well. I refer to the fashion for polarizing everyone and everything in terms of "progressive" or "traditional".

The "either-or fallacy" has been with us for a long time: the tendency to ignore the various shades of grey between the clear black and the clear white. But, in education at least, real discussion is almost destroyed these days by this pigeon-holing of teachers and other categories or the other.

Life in our comprehensive schools is much more complicated than this allows. School staffs are made up of a variety of individuals representing many shades of opinion, both educationally and politically in the widest sense. I reject the notion that schools are monolithic institutions where there is unanimity of opinion, to the point where a flag can be run up the mast bearing the word "progressive" or "traditional".

But, more important, few teachers can be branded as one or the other. For one would be highly tempted to have either epithet applied to me. There have been vast changes in

Should authority always be a dirty word? Factors determining subject specialisation Russian postcards on an English legend

the organization of education in the past 10 years, and clearly teaching methods have had to change. But what has happened is that good teachers have become much more flexible, so that their repertoire of methods is greatly increased. This does not mean that the "traditional" has been jettisoned, or if it has been jettisoned the results are detrimental to good education.

The good teacher has been careful not to throw out the baby with the bath water, and has married new methods (for instance, with the technology of the classroom) with others which can be called "traditional", but which are really simply sound basic techniques. The good teacher has command of a wide variety of methods, but he is still very much interested in such "traditional" virtues as discipline, concentration, and high standards of endeavour.

Too often the education "debate" is conducted in terms which suggest it is a choice between the one or the other, as though "modern" methods preclude worthwhile disciplines and the consequent high personal standards on the part of pupils. One of the most pernicious of the current fallacies is the idea that modern methods must mean a vaguely leftist attitude to discipline, when the reality is that these methods work best when operated against a background of firm, consistent discipline.

We owe it to parents to explain that most schools have teachers in them who are pretty much like those I have described—not, on the whole, long-haired revolutionaries on the

one hand, nor stiff-necked reactionaries on the other. And we owe it to those who are contemplating teaching as a career. There are still schools where "authority" is not a dirty word, and where those in leadership positions are not afraid to exercise leadership.

The truth surely is that every human being is a mixture of "progressive" elements and "traditional" qualities, and teachers are no exceptions. I reject the labels because I know I am a rebel in some matters and a traditionalist in others.

Why is there this obsession with using labels? The only answer that makes sense, apart from the universal human tendency to classify and categorize, is that these tags are used for political ends: each is used by the other side as a pejorative term. My feeling is that most teachers are sick of it, for they are interested simply in teaching as skillfully as possible.

Perhaps the plea for proportional representation and for devolution are part of a general revulsion against this tendency to allow only two "sides". It may be that people are looking to our political institutions to reflect our differences more, and the fact that we are more complex than sterile arguments between "right" and "left" allow. We should all make a resolution to make more of a fuss when anyone tries to pigeon-hole us or distort our views into an absurd caricature.

Richard Nicholson is deputy head of Sheraton Comprehensive, Stockton-on-Tees.



Today's most labelled man? Terry Ellis with children of William Tyndale School.

Robin Hood, Soviet hero

Lev Frukhtman

A set of coloured picture postcards on the theme of Robin Hood has been put out in the Soviet Union in 2,000 copies by the Representative Art Publishing House.

The artists are Alexander Blokh and Leonid Korsakov, who are illustrators of novels, science fiction and Soviet and foreign classics. Though each one works in a genre and style of his own, they came together in this work through their common interest in Robin Hood, a popular hero of Soviet children. Thanks to numerous drawings and illustrations by Soviet artists, the children know him, so to say, by sight.

Authors: English: Ballads: About: and dress.

Robin Hood, and the so-called songs of the Greenwood, were published in Russia in the mid-nineteenth century. But Robin Hood really came into his own in Russia in the 1920s. One of the first publications of the World Literature series in the Soviet Union was the 1917 revolution was *The Ballad of Robin Hood*, which appeared in 1919, and was edited and prefaced by Maxim Gorky.

Since then Robin Hood has often appeared in poetry and prose by Soviet authors. Alexander Blokh says he got the idea of illustrating the ballad of Robin Hood through his love for the Middle Ages. He has studied the epoch, its way of life

"Robin Hood is a legendary hero, of whom the reader already has a definite image in his mind," he says. "Our Robin Hood does not contradict it: he is tall, handsome, manly, strong and agile. But we developed a new, purely graphic treatment. Against the background of heavy knightly garb and armour, the Greenwood archer is light and supple. Robin Hood, as it were, just retribution, and that was how we sought to depict him on the postcards."

Lev Frukhtman is the London correspondent for the Novosti Press Agency.

The authors of the Talkback article "Courses for sources" (January 2) were Michael Gill and T. Gwynne.

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1911

N DEPARTMENT

ARY SCHOOLS

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AA
PT, required for Easter, or as soon
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SUBJECTS:
ERY SCHOOL
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D LANGUAGE DEVELOPMENT. A
 n this field is required to maintain
MATHEMATICS: Experienced tea-
 chers in this area.

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E.T. work if possible—otherwise
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Cleveland

TOOLS

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teacher in the specific area of the curriculum
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Teachers within 14 days of the

County of Cleveland

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 -ington, Cleveland TS6 4AL**
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 in mathematics would be an advantage.

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 integral in Movement and Music. The school has a large
 playground and a large household removal express is available
 in approved cases.

Application may be made by letter to an application form
 available from the Head Teacher at the address above.
 Applications for letter should include detailed information
 regarding education, training, qualifications and experience, to-
 gether with the names and addresses of three referees.

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هكذا من الأصل

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Wonders all

1000 Great Lives. By Plantagenet Somerset Fry. Hamlyn £2.50. 0 600 34411 8.
Junior Pears Encyclopedia. Edited by Edward Blisshen. Pelham Books £2.50. 7207 0843 5.

The best that can be said of 1000 Great Lives is that it is unnecessary; 313 pages of potted biographies of "great" people, ranging in time from Menes (who?) inchoate and Abraham to a knight, Ben Curzon, and Noel Coward (why?). A non-book, non-serving a non-audience.

Inevitably, the production of factoids for young readers involves this kind of thing: of Auden he writes, "His output of verse was extensive and brilliant. It was probably more simple and direct than that of many contemporaries." Now, what does that mean? Why "probably"? Either it was "more simple, etc." or it was not. Why hedge? Presumably one

hedges when possessed by intricate complexity, or when indifferent; in this sort of context it seems to signify: (a) I'm not really sure; or, (b) I don't really care one way or the other. To which one responds with (c) Does it really matter?

Mr Fry's touch is frequently ineffectual; of Elgar he writes, "His work, which, admittedly took years to achieve recognition, is in many instances worthy to be compared with the finest compositions of musical history." Does anyone really use that kind of language of someone whose works they love? Women readers will doubtless note that the ratio of men to women is 22:1. The vulgarity of Mr Plantagenet Somerset Fry's book is of the sort that gives books of knowledge a bad name when will publishers give up producing this kind of rubbish? Presumably when there is no market for it: one must assume that there is such a market and that is perhaps the most depressing aspect of a very depressing book.

It is a relief, then, to turn to Edward Blisshen's Junior Pears fifteenth edition. As always, it's scrupulously done: reliable, astonishingly encyclopaedic, and about those aspects of the world that excite young curiosity and give peculiarly absorbing on rainy days. One can, of course, carp about details: the section on "Explorations and Discoveries" could benefit from a better note to the effect that all those Indians, Eskimos and so on, weren't waiting to be "discovered"; and the illustrations to the section on architecture still appear to be suffering from delirium tremens; but why carp?

At £2.50 Junior Pears is quite remarkable value; a suffusion of the benign personality of its egotistical editor does not intrude, but points the way both to further possibilities and also to more

laborious than difficult, from the viewpoint of the enthusiast who has a reasonable amount of practical ability. It is even possible to buy the optics and fit them together at a cost of a very few pounds, though the more ambitious amateur will be more inclined to construct even the optics for himself.

This latest addition to the Horocura is by a British amateur who has written several previous books, including a valuable fiction. After

mature conceptions of what is worth knowing and why it is so. So, congratulations again to Edward Blisshen and his impeccable team.
Geoffrey Summerfield

The Guinness Book of Records (Second edition). Compiled by Norris and Ross McWhirter. Guinness Publications Ltd £2.50. 0 900424 25 5.

The annual appearance of a new edition of the Guinness Book of Records is becoming as traditional as chestnuts in the fire, and the ritual of Christmas stocking filling. Here we are with the twenty-second one of its line; the mixture, as before, of the most trivial and the most proportioned and achievements of godlike men and manlike freaks laid bare by the cruel statisticians. The wonder is that there are any mediocrities left to tread the golden mean.

Yet the more editions, the greater the wonder as to the true purpose of the book. Is it for entertainment or edification? In many of its entries, it is very similar to Ripley's Believe It or Not, the sole arbiter of playground disputes for over 50 years. The first entry tells that Goliath of Gath, measured at six cubits in the Old Testament, could be 9ft 10in if the prophet was using the Hebrew unit, or if the Greek unit was used in a rare streak of xenophilia, a mere 6ft 10in, leaving Goliath putting up a seven foot dwarf among modern gladiators.

This edition differs in some respects from its predecessors. It has become a record itself, as it has been Dr Spock's baby care manual into third place as the all time best seller next to the Bible. Sadly it is the last of the series that will bear the name of Ross McWhirter as co-editor on its title page. The book is the brainchild of both him and his twin brother, Norris; their search for likely and unlikely candidates for their pages led them to have sent them several times round the world.

Their strength has been in the field of sport, and it is here that the book's real value lies. The new edition has an attractive table setting out the Olympic track and field event records in its endpiece. All the sports records have been thoroughly re-examined and brought up to date, though sublimely fonts of agility and combative prowess with the vulgar achievement of the most money earned in each event. Illustrations are on the whole unimpressive, and the format seems stuck in the 1950s.

It all makes pretty constipated reading. Perhaps one thing is intended to last only in the form of a smilo in the foam of that well advertised glass of Irish stout.
Robert Fox

Seeing stars

Beginner's Guide to Astronomical Telescope-Making. By James Muirhead. Pelham Books £4.75. 0 7207 0822 2.

Amateur astronomy has come very much to the fore in recent years, and there are many local societies; the annual Yearbook of Astronomy lists more than 100 in its 1976 edition. Obviously, the amateur will need optical equipment, but telescopes are now very expensive if bought new, and more and more enthusiasts are considering making telescopes for themselves. Many books upon telescope-making have been produced over the years, but the basic principles remain unchanged; it is surely significant that the classic treatise, written by Rev W. F. A. Ellison more than forty years ago, has never been surpassed, and has possibly never been

equalled. In fact, making a telescope is more laborious than difficult, from the viewpoint of the enthusiast who has a reasonable amount of practical ability. It is even possible to buy the optics and fit them together at a cost of a very few pounds, though the more ambitious amateur will be more inclined to construct even the optics for himself.

This latest addition to the Horocura is by a British amateur who has written several previous books, including a valuable fiction. After

giving a general introduction, the author describes how to make a simple refractor, and then deals with reflectors in much more detail; there is also a later chapter on producing an object-glass for a refractor—something which very few amateurs have so far dared to attempt.

The style is clear, the treatment is comprehensive, and the line drawings and photographs are fully adequate. It is clear that the author has made mirrors and other optical components on his own account, so that he has been able to give some very useful hints. The book is, admittedly, very expensive, even by modern standards, but the would-be telescope-maker will find it useful.
Patrick Moore

The Stars: A New Way to See Them. By H. A. Rey. Chatto and Windus £3.95. 0 7011 8051 3.

Although the New York Herald Tribune may have been overblown in describing this book as "one of the greatest improvements in observational astronomy yet made," it does remain true that the book's first appearance in 1952 marked a refreshingly new approach to the quite difficult task of becoming familiar with the unchanging patterns of the constellations.

In absolute terms the shapes of the constellations are not difficult

Storks redundant

Peggy Heeks on sex education

Knowing About Sex: The Baby Arrives £2.50. 333 18393 2. Growing Up £3.50. 18394 0. Achieving Sexual Maturity £4.95. 18395 9. Edited by James Hemmings and Zena Maxwell. Macmillan.

This £10.95 package of sex information, arranged in three books for infant, junior and secondary age groups, was published two years ago in Paris, comes from a team of four French writers, and has now been edited for the English market by James Hemmings and Zena Maxwell.

Volume One begins, in that style beloved some decades ago, "It's a beautiful sunny Sunday morning and off we go with the immaculate Lambert family (Frank, 15; Mary, 12; Susan and Tom, 7) to visit Uncle Jack and Auntie Linda who (surprise) is expecting a baby. On their return Father backs to the twins to sit down before him: 'It's a long story', he begins, and by the end of the book we have learnt how humans, dogs and birds mate and how a baby is born. Simultaneously in Volume Two we have a holiday by the sea. Since the 10-year-old breakfast naked and nude is pregnant the conversation soon gets on the right lines. 'What's all this about not knowing?' asks Father (although the children have said nothing of the sort), and proceeds to a lecture on the

Twentyeth century gold

Story of North Sea Oil. By Leith McGrandle. Wapland £3.60. 85340 433X.

It's difficult to know what to make of this book. It is not labelled as intended for a juvenile market, but it is written in a sort of telegraphic parody of the journalistic art, with a fondness for superlatives which puts one in mind of times of Batman and Billy Hunter. The overall impression is that the author has struggled, with limited success, to write down to a young market with which he is far from familiar.

As well as the uncomfortable feeling generated by the text, and in spite of a reasonable production job by the publishers the book looks sloppy and hastily thrown together. The illustrations are from a wide variety of sources, drawn in a wide variety of styles, and they do not always clarify the particular point the author is trying to make.

The book is a mixture of part digested facts, heard on a radio, a leavening of cliché, for instance, "Oil is the twentieth century man's

needs to deal with concepts of conception, birth and disease, taking the program further than the interest of sex.

Volume Three sets out, in a comprehensive and understandable form, the realities of sex. It is not a value judgment but a fact. What is virginity, how is it able to use a diagram of first sexual relations? All this, more, in a book which is not cross between a chemistry and an anatomy manual for the young.

The covers carry the same message: a claim to be valid. The illustrations are by Leith McGrandle, and are as richly detailed as the text. The explanations are clear and engaging; the material is laid out in a logical and thoughtful way. The New World covers the pre-historic, the classical, the medieval, the renaissance, the baroque, the eighteenth century, the nineteenth century, the twentieth century, and the future. The book is a masterpiece of clarity and insight, and is a must for every young person's library.

After the decades of pleasure that the multi-talented team known in the theatre as "Motley", have been available elsewhere in the extensive list of publications much pleasure on the printed has sprung up following the success of Theatre Props.

Theatre Props comes as a relief to the amateur who has been put off by the complexity of the subject. It is a book that is both easy to read and full of useful information. The author, Leith McGrandle, is a professional actor and director, and his knowledge of the subject is evident in every page. The book is a must for every amateur who is interested in the art of stage production.

Mollusca

Shells of Britain and Europe. A guide to colour. By Leith McGrandle. Hamlyn £1.05. 600 380 0.

This book is a handsome and useful addition to the Hamlyn Colour Guide Series. If he more than scratches, reads it, and examines a few specimens among those illustrated, a reader of any age will have a fair basic idea of the mollusca; no land forms are included.

There is a good general description of body structure and function, after which the main classes are dealt with in more detail. The terms are freely explained. To the casual reader no more is needed, but anyone whose interest is more than a passing one will find the book a most useful reference.

The author's illustrations, which are a real asset to the book, are a most useful reference. The book is a must for every amateur who is interested in the art of stage production.

Frank Ansell

THE TIMES EDUCATIONAL SUPPLEMENT 30.7.76

Picturing the past

Charles Thomas on archaeology

The Making of the Past series: The New World. By Earl Swenson. Pelham Books £2.50. 729 0017 6. The Aegean Civilisation. By Peter Warren. 0 729 019 2. Elsevier/Paidon £3.95

Although the publishers of these two books (the first-class series) do not usually claim that they are directed at older children, some practical experiment during the post-Christian era has dog days makes it pretty clear that any such claim would be valid. The illustrations are by Leith McGrandle, and are as richly detailed as the text. The explanations are clear and engaging; the material is laid out in a logical and thoughtful way. The New World covers the pre-historic, the classical, the medieval, the renaissance, the baroque, the eighteenth century, the nineteenth century, the twentieth century, and the future. The book is a masterpiece of clarity and insight, and is a must for every young person's library.

The Aegean Civilizations is a slice of classic Mediterranean prehistory (a field in which Dr Warren has been

personally involved) and it deals with the story of Mycenae and Crete from the local Neolithic up to about 1200 BC. As with The New World, there is a fair and informative treatment of the history of discovery of the past (in this case, Evans, Schliemann, and others) and a sense of continuous achievement comes across. The visual stories include the Palace of Minos and the major Mycenaean tombs, but they also embrace an excellent potted tour of the author's own site at Mycenae, where an eruption in about 1500 BC sealed a town. Again we have a reading-list, and a most useful glossary.

Both books are first-class value—well set out, and fully illustrated: school libraries would do well to acquire the whole series. They are also useful for the intelligent teenager, and for the professional archaeologist, too. Not often can one afford this sort of welcome to yet another venture into a crowded field.

The Aegean Civilizations is a slice of classic Mediterranean prehistory (a field in which Dr Warren has been

Cooking up props

Donald Walker on amateur theatre

Theatre Props. By Margaret Harris and Elizabeth Montgomery. Studio Vista £3.95. 0 289 70594 0.

After the decades of pleasure that the multi-talented team known in the theatre as "Motley", have been available elsewhere in the extensive list of publications much pleasure on the printed has sprung up following the success of Theatre Props.

Theatre Props comes as a relief to the amateur who has been put off by the complexity of the subject. It is a book that is both easy to read and full of useful information. The author, Leith McGrandle, is a professional actor and director, and his knowledge of the subject is evident in every page. The book is a must for every amateur who is interested in the art of stage production.

pantry shelf? Anticipating just such a pass, "Motley" have provided early in the book an invaluable "Ingredients" list of basic prop room tools and materials.

Plainly, any attempt at a price list for materials these days would date the book within a fortnight, but there are indications in, for instance, the splendid chapter on moulding, of convenience compared to price. But there are disappointments ahead for the inexperienced amateur or student at whom the book is directed in the publishers' blurb. Some of the descriptions of scenery, props and sound far simpler than they are; an occasional note of caution is included in the text,

but a tendency towards glibness, born of the expert's familiarity with materials, could leave the beginner with a disappointing, not to say expensive, disaster on hand.

Nevertheless, Elizabeth Montgomery's lucidity in her jewelry chapter is to be commended, as is her frankness in suggesting that certain modern items are better hired or purchased. In other sections, lamp fittings, flowers and trees, a variety of hand props and furniture are discussed and, accepting the impossibility of including everything, a selection is chosen for illustration are sufficiently basic to demonstrate techniques which can be applied to many other requirements. This is a valuable addition to theatre books.

The Yellow Storyhouse The Red Storyhouse The Blue Storyhouse The Green Storyhouse

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David Jackson and Dennis Pepper

There is an 'in-between' stage in reading for most children, when they have mastered a reading scheme, but need encouragement and stimulation before tackling more advanced books with confidence. These collections are full of fantasies, tales and jokes which will excite their imagination and interest and give them every incentive to read on.

As well as the more literary stories, there are anecdotes, comic strips, fairy-tales, poems, legends and visual stories told through photographs, paintings and cartoons. They are drawn from all over the world and from the traditions of many cultures. They will appeal to children from seven upwards, and are as colourful and exciting to look at as they are to read.

The author's illustrations, which are a real asset to the book, are a most useful reference. The book is a must for every amateur who is interested in the art of stage production.

Frank Ansell



The royal barge passing Whitehall in the reign of William and Mary, 1690. This illustration taken from "Buildings" by Alan James, the latest in the series of architectural terms and information about planning and building techniques.

By star and satellite

The Navigator's Art. By A. B. A. Hulson. Mills and Boon £3.40. 0 263 05592 2.

The ancient mariner went to sea with more than his fair share of preoccupations—not least of which were where he was meant to be going, when he would arrive, and whether he would ever succeed in reaching his destination.

True, the ingenious Polynesians hit upon the idea of setting out direction stones on the mainland pointing to distant places, but, short of inspiring confidence, they were probably of no greater use than a cliff-top sign at Dover pointing the way to Buenos Aires.

We know that the Phoenicians traded with the Cornish tin miners and even circumnavigated Africa, that Pytheas of Massilia voyaged as far as Iceland and lived to tell the tale, and that the Vikings surprised themselves by landing on the shores of North America, but their navigation was little more than a pot-pourri of inspired guesswork and good luck.

The Navigator's Art traces the history and emergence of navigation from its beginnings and looks upon the idea of setting out direction stones on the mainland pointing to distant places, but, short of inspiring confidence, they were probably of no greater use than a cliff-top sign at Dover pointing the way to Buenos Aires.

Frank Eggleston



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TES

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Catering for a basic diet

Geoff Fox on "literary roughage"

We are the Champions. By Sean Connolly. Hodder and Stoughton £2.20. 0 340 191155.
Adam and the FA Cup. By Kathleen Sibley. Dutton £1.40. 0 234 77255 0.
The Green Hill Dodgers. By Louise Salway. Kaye and Ward £2.25. 0 7182 1122 7.
Louie's Snowstorm. By E. W. Hildick. Andre Deutsch £2.50. 0 233 96695 4.
Number 21. By Stanley G. Watts. Macdonald and Janes £2.25. 0 356 08354 3.

Although it often seems a fair step from 2D's library period last thing on Wednesdays to Coleridge's belief that "the reading of a poem may bring the whole soul into activity", there is no doubting the complexity of the process of reading. Among other things, reading may allow the enjoining of what ever feelings of expectancy, tension and release, fear, sadness, excitement, hope and affection which plot, image or character may provoke. Since responses are highly idiosyncratic, it seems possible to generalize only about areas of response: to say, for example, that a reader may be enabled to define his own experience through comparison with a character's situation; or to relish the excitement he cannot enjoy—and could not endure—in daily life.

Most readers, in practice, develop a balanced diet. Alongside the subtleties of the discerning palate, there is a continuing need for what might be termed "roughage": undemanding reading which satisfies some basic needs. For the adult, this could be a thriller or a romance; young readers choose different food. For example, it seems likely that, from the limited research in this field, that children frequently read for security—hence, predictability of plot and

character are common characteristics of many popular books. End Bliton wrote basic roughage. The corollary is not, however, to regard all reading indiscriminately, any more than falling to distinguish between television pot-boilers. *Callen or The Avengers* offer far more substantial entertainment than *Crossroads*. The former have energy, some depth of characterisation, and developed conventions which, although giving the viewer the pleasure of recognition, are usually sharpened by self-parody. They are also unpretentious and suffer less from poverty of dialogue.

There is, inevitably, much *Crossroads* material on the pulchre children's book market. Among this batch of rather ephemeral books it is possible to recognize some that offer lively, if fleeting, entertainment, and others which claim little more than the possibility of helping a bookish reader over the hurdle of getting from first page to last.

We are the Champions is about soccer, and consequently many readers will see it through, simply to discover by how many goals Drove's End Boys finally win the county cup. The "good" characters, whether adults or boys, are virtually indistinguishable in either personality or dialogue. The "bad" characters, especially the heavies, speak in a more slovenly way, and the chief villain is a fat, blustering grocer, while his ugly henchman has close-cropped hair and chain-smokes. Situations are unconvincing, resolution of plot is wholly predictable. It is not giving too much away to reveal that the hero, long-haired gypsy centre-forward George Crode (cf. Best, got it?) scores all three goals in the final. It is a very straightforward read, but might genuinely be "useful" for a boy in love with soccer who normally dislikes reading.

Adam and the FA Cup is appropriate for rather younger readers

—perhaps, like Adam himself, preoccupied with about nine or 10. In implausibility the book gives *We are the Champions*—but as with some television "sit-coms" the pace of the comedy makes literal plotline unimportant. Kathleen Sibley employs a simple vocabulary and surrounds Adam with lively, often funny situations and strongly sympathetic adults (apart from a stereotyped crook who drops his jenny and mutters "It's a fair cop" when deceived by a linguistically agile parrot). There are moments when Adam's family seems dangerously close to Peter and Jane in Ladybirdland, but this is offset by the detailed description of a visit to United's ground and the break pursuit of The Shadow, who has stolen the FA Cup.

The Green Hill Dodgers live in a bleak, flat, the book of the same name recounts five of their adventures around the estate. There are no crooks, no fantasies; rather, gently comic episodes involving an attempt to run a taxi-service in a trolley, an old car dumped in a sea, the setting up of a stall for charity, collecting and selling, and an elderly neighbour's birthday. Unfortunately, it may be that the Dodgers are too much like real kids. Their activities recall the exploits of Richard Crompton's Fieldmice, but William and The Outlaws, to say nothing of Violet Elizabeth Bott and Hubert Lane, are magnificently bigger than life; unclose-cropped hair and chain-smokes. Situations are unconvincing, resolution of plot is wholly predictable. It is not giving too much away to reveal that the hero, long-haired gypsy centre-forward George Crode (cf. Best, got it?) scores all three goals in the final. It is a very straightforward read, but might genuinely be "useful" for a boy in love with soccer who normally dislikes reading.

Adam and the FA Cup is appropriate for rather younger readers

Hildick's books are highly successful in the United States, and it is no surprise to find this most professional writer including an American girl among his characters. The book's strengths lie in the racy narration—an intimate but punchy jocularism from writer to reader—and in one basic comic notion: Louie is seen throughout in mock-heroic terms—the nonpareil of milk works well as Louie and his young, highly trained helpers struggle through a Christmas Eve blitzard to get the goods delivered in the tradition of *Woe Is Pargo*: a boy's got to do what a boy's got to do. *Adventures* repeatedly distract our heroes, but the headlong momentum falters only over tedious descriptions of the minutiae of milk delivering and excessive attempts to sustain the mock-heroic ("Lips a nice glowing red, like the cup on a bottle of homogenized"). Tim reflected, accompanied by three parallel reflections—or Louie's version of the constellations as the Large-Size Yogurt and the Empty Crates, the Seven Half-Pints and the Churn). Number 21 is perhaps the best written of this group. The novel was first published in 1966, and there is a strong sense of the midlands industrial town which provides the pervasive setting for the adventures of a group of children. The town is the raw and dirty, but charged with unselfish warmth and energy. The dialogue of the children is particularly immediate: sudden, impulsive, swinging between the abusive and the affectionate. The narrative wanders easily, even inconsequentially (rather like the game) through episodes which many an adult will thoroughly enjoy, though younger readers may demand a stronger, clearer narrative and find the loosely strung strands of *Number 21* confusing or even frustrating.

Adam and the FA Cup is appropriate for rather younger readers

Adam and the FA Cup is appropriate for rather younger readers

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Chambers 

11 Thistle Street Edinburgh EH2 1DG

Emerald anthology

Chris Waters on Irish poetry

The Wolfhound Book of Irish Poems for Young People. Edited by Bridie Quinn and Seamus Costello. Wolfhound Press £2.50. 0 95034543 1.

Pythonesque as it may seem, the title is bona fide: this is a collection from a Dublin publisher of Irish poetry from the early Middle Ages up to the present day, selected with the young reader in mind. Wishing neither to perplex nor to condescend, the editors hope their choice will be both a challenge and a pleasure to read, and have tried to communicate the idea that poetry is a means of identification and discovery. Their choice covers themes from creatures and places, to history, folklore and legend.

It opens with some superbly taut and vivid translations from the Gaelic by Frank O'Connor and Brendan Kennelly, which in terms of their music, clarity, directness and simplicity of feeling, set a difficult precedent for centuries to come. Much of the Anglo-Irish poetry of the nineteenth century and later (or at least some of the more minor pieces included here) seems to

suffer from an excess of whimsy, charm and diffidence, like much English Georgian verse. Arguably, this was a result of imposed English rule, and it is interesting that Irish poetry found its voice and its feet in verse at about the time it severed most of itself from England.

Anyway, all this does mean that there are several poems in the book sufficiently true and pretty to warrant exclusion from any similar English publication. Checking through the notes, too, it is rather alarming to note just how much editing has gone on: a great number of poems have been drastically abbreviated for reasons of space, sometimes from the middle as well as the end and this is bound to create some false impressions.

In spite of this, there is enough splendid poetry from the names one expects: Joyce, Yeats, Kavanagh, MacNiece, Murphy, Heaney, Wilde, Synge, and from some less well known poets, past and contemporary, like Austin Clarke and Michael Hartnett, to make this anthology, which is illustrated with drawings and photographs, well worth having in the library.



"Silly Old Uncle Fezzie" is the title of Pelham Books' third in their *Bagpuss* Beginners series (55p). The books are early readers based on the BBC television programme "Bagpuss" about the amiable, happy old cloth cat who thinks visible thoughts. Oliver Postgate's story is charmingly complemented by Peter Firmin's illustrations.



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SECONDARY

Remedial Posts
continued from page 40

WEST SUSSEX
HILLINGDON HIGH SCHOOL
Station Road, Hillingdon,
Buckinghamshire
Applications for remedial posts in the following subjects are invited from suitably qualified teachers. The following posts are available for one term only but there may be a possibility of a permanent position.

Applications should be sent to the Headmaster, Hillingdon High School, Hillingdon, Bucks. HP8 4JH.

NOTTINGHAMSHIRE
COUNTY COUNCIL
EDUCATION DEPARTMENT
Applications are invited from suitably qualified teachers for the following posts in the following schools.

THE DUNDEE COMPREHENSIVE SCHOOL
Whitney Lane, New Olton,
Newark, Nottinghamshire
NG24 9TD

WOLVERHAMPTON
EDUCATION DEPARTMENT
Applications are invited from suitably qualified teachers for the following posts in the following schools.

ST. MARY'S SCHOOL
St. Mary's Road, Wolverhampton
WV1 1JH

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CROYDON

CROYDON HIGH SCHOOL
Croydon, Surrey
Applications for remedial posts in the following subjects are invited from suitably qualified teachers. The following posts are available for one term only but there may be a possibility of a permanent position.

Applications should be sent to the Headmaster, Croydon High School, Croydon, Surrey. CR9 3JH.

NOTTINGHAMSHIRE
COUNTY COUNCIL
EDUCATION DEPARTMENT
Applications are invited from suitably qualified teachers for the following posts in the following schools.

THE DUNDEE COMPREHENSIVE SCHOOL
Whitney Lane, New Olton,
Newark, Nottinghamshire
NG24 9TD

WOLVERHAMPTON
EDUCATION DEPARTMENT
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Scale 1 Posts

DEVON
HILLINGDON HIGH SCHOOL
Croydon, Surrey
Applications for remedial posts in the following subjects are invited from suitably qualified teachers. The following posts are available for one term only but there may be a possibility of a permanent position.

Applications should be sent to the Headmaster, Hillingdon High School, Hillingdon, Bucks. HP8 4JH.

NOTTINGHAMSHIRE
COUNTY COUNCIL
EDUCATION DEPARTMENT
Applications are invited from suitably qualified teachers for the following posts in the following schools.

THE DUNDEE COMPREHENSIVE SCHOOL
Whitney Lane, New Olton,
Newark, Nottinghamshire
NG24 9TD

WOLVERHAMPTON
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LANCASHIRE COUNTY COUNCIL

BLACKPOOL COLLEGE OF TECHNOLOGY AND ART
Ashfield Road, Bispham, Blackpool

DEPUTY VICE-PRINCIPAL

(Head of Department V)

Details on application.
Salary: Head of Department Grade V.
Further details and Application Form from:
The Principal.

HERTFORDSHIRE COUNTY COUNCIL
HERTFORDSHIRE COLLEGE OF BUILDING
ST. ALBANS

Applications are invited for the post of

Principal

of the College which will become vacant on 1st September, 1976, on the retirement of the present Principal, Mr. N. Parker O.B.E.

The College, which is the County centre for all education related to the construction industry, offers a considerable range of courses in this field and attracts students from a wide area. Applicants for the post should be well qualified at graduate or postgraduate level. They should have had good experience in the construction industry or in an allied profession, together with substantial related educational experience including the exercise of administrative responsibility. The salary group under the current Bournemouth Further Education Report is 4.

Further details are available from the County Education Officer (Ref. GHM) County Hall, Hertford SG13 8DF, to whom applications should be submitted by 20th February, 1976.

CLWYD AND GWYNEDD EDUCATION AUTHORITIES
LLANDRILLO-TECHNICAL COLLEGE

Colwyn Bay

Principal

Applications are invited from appropriately qualified persons for the post of Principal of this College which is situated on the coast, mid-way between Colwyn Bay and Llandudno and on the borders of the Counties of Clwyd and Gwynedd.

The College is administered jointly by the two Authorities. The present Principal will retire at the end of August but it is hoped that the successful candidate can take up duties as from 1st May, 1976.

The present building was opened in 1954 but has subsequently been extended appreciably. It houses four main Departments—Engineering, Construction and Science; Commerce and Liberal Studies; Hotel-keeping and Catering; and Fashion and Health.

Salary: Group 4 College.

Further particulars and application forms may be obtained from the Director of Education, Education Department, Shire Hall, Mold, Clwyd.

Completed applications should be returned by 13th February, 1976.

WARWICKSHIRE COUNTY COUNCIL
EDUCATION DEPARTMENT

MID-WARWICKSHIRE COLLEGE OF FURTHER EDUCATION

Warwick, New Road, Leamington Spa
Principal: P. J. Rodgers, B.Sc.(Econ.)

VICE-PRINCIPAL

required 1st September, 1976 for this Group 5 College. Further particulars and application forms can be obtained from Mr. Clisby, date 16th February 1976.

22 Northgate Street, M. L. RIDGER
Warwick, CV34 4SR County Education Officer

PREPARATORY
Other Appointments
continued

LONDON SW13

THE LONDON BOROUGH OF NEWHAM
COLLEGE OF FURTHER EDUCATION
100, Victoria Road, London E16 1JH
The College of Further Education, Newham, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Newham, 100, Victoria Road, London E16 1JH, by 15th February 1976.

MIDDLESEX
NORTHWOOD COLLEGE
100, Victoria Road, London E16 1JH
The College of Further Education, Northwood, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Northwood, 100, Victoria Road, London E16 1JH, by 15th February 1976.

MIDDLESEX
NORTHWOOD COLLEGE
100, Victoria Road, London E16 1JH
The College of Further Education, Northwood, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Northwood, 100, Victoria Road, London E16 1JH, by 15th February 1976.

RICHMOND UPON THAMES
WINDMILL HOUSE SCHOOL
Windsor Road, Richmond, Surrey TW9 1JH
The College of Further Education, Richmond, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Richmond, Windsor Road, Richmond, Surrey TW9 1JH, by 15th February 1976.

SOMERSET
TAVISTOCK JUNIOR SCHOOL
Tavistock, Devon PL19 8JH
The College of Further Education, Tavistock, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Tavistock, Tavistock, Devon PL19 8JH, by 15th February 1976.

SOUTH NOTTINGHAMSHIRE
GROSVENOR SCHOOL
Grosvenor, Nottingham NG1 1JH
The College of Further Education, Grosvenor, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Grosvenor, Grosvenor, Nottingham NG1 1JH, by 15th February 1976.

SOUTH YORKSHIRE
HARROGATE COLLEGE
Harrogate, Yorkshire HG1 1JH
The College of Further Education, Harrogate, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Harrogate, Harrogate, Yorkshire HG1 1JH, by 15th February 1976.

SURREY
CLAREMONT SCHOOL
Claremont, Surrey GU10 1JH
The College of Further Education, Claremont, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Claremont, Claremont, Surrey GU10 1JH, by 15th February 1976.

SURREY
CLAREMONT SCHOOL
Claremont, Surrey GU10 1JH
The College of Further Education, Claremont, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Claremont, Claremont, Surrey GU10 1JH, by 15th February 1976.

WARWICKSHIRE COUNTY COUNCIL
EDUCATION DEPARTMENT
MID-WARWICKSHIRE COLLEGE OF FURTHER EDUCATION
Warwick, New Road, Leamington Spa
Principal: P. J. Rodgers, B.Sc.(Econ.)

Colleges of Further Education
Heads of Department

DEVOY
EDUCATION COMMITTEE
100, Victoria Road, London E16 1JH
The College of Further Education, Devo, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Devo, 100, Victoria Road, London E16 1JH, by 15th February 1976.

Other Appointments

BARKING
LONDON BOROUGH OF BARKING
100, Victoria Road, London E16 1JH
The College of Further Education, Barking, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Barking, 100, Victoria Road, London E16 1JH, by 15th February 1976.

BARNET
LONDON BOROUGH OF BARNET
100, Victoria Road, London E16 1JH
The College of Further Education, Barnet, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Barnet, 100, Victoria Road, London E16 1JH, by 15th February 1976.

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The College of Further Education, Barnet, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Barnet, 100, Victoria Road, London E16 1JH, by 15th February 1976.

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The College of Further Education, Barnet, is seeking applications for the post of Deputy Vice-Principal. The successful candidate will be responsible for the day-to-day running of the College and will report to the Principal. The post is a full-time position and the salary is £5,931 to £6,956 p.a. depending on experience. Applications should be sent to the Principal, College of Further Education, Barnet, 100, Victoria Road, London E16 1JH, by 15th February 1976.

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HUMBERSIDE COUNTY COUNCIL
HULL COLLEGE OF HIGHER EDUCATION

This new College, to be designated in September, 1976, will be the successor to the Hull College of Education and the Hull College of Technology. It will be a centre for higher education in the Hull area, offering a wide range of courses in the fields of Science, Engineering, Technology, and the Arts. The College will be a member of the University of Hull and will be subject to its regulations. Applications for the post of Deputy Vice-Principal should be sent to the Principal, Hull College of Higher Education, 100, Victoria Road, Hull, by 15th February 1976.

CAREERS GUIDANCE
ECONOMICS
LAW
SOCIOLOGY
SOCIAL PSYCHOLOGY
PSYCHOLOGY
SOCIAL WORK

Applicants should have good academic and professional qualifications and experience in teaching at degree level. Applications should be sent to the Principal, Hull College of Higher Education, 100, Victoria Road, Hull, by 15th February 1976.

Further particulars and application forms, to be returned by 14th February 1976, may be obtained from the Principal, Hull College of Higher Education, 100, Victoria Road, Hull, by 15th February 1976.

CITY OF BATH TECHNICAL COLLEGE
Principal: C. A. Thompson, B.Sc., Dip.Ed.Applications are invited for the post of
HEAD OF DEPARTMENT
OF
CONSTRUCTION INDUSTRIES
(Grade III—£6,231-£7,023)

from 1st September, 1976, because of the retirement of the present Head on the 31st May 1976.

Application forms and further particulars available from the Principal, Avon-Street, Bath, BA1 1UP.

LEIGH COLLEGE
Head of Department
of Engineering & Building

F.E. BURNHAM GRADE IV
This Authority has established a new Technical College to provide for all post-secondary education in the Leigh area. The College is to be opened in September, 1976. Applications are invited from persons with good academic qualifications in engineering or building science who have sound practical experience in industry and possess some innovative leadership. Duties are to commence on 1st May, 1976, or as soon as possible thereafter.

Further particulars and application forms are available from the Principal, Leigh College, 100, Victoria Road, Leigh, by 15th February 1976.

Completed applications should be sent to the Principal, Leigh College, 100, Victoria Road, Leigh, by 15th February 1976.

Metropolitan Borough of WIGAN
Crewe & Alsager College
of Higher Education

(Director—Miss B. P. R. Ward, M.Ed., F.R.S.A.)
Head of Drama

This is a key post in a new College with major approved, and protected, Dip.H.E. and Degree courses.

Salary: Principal Lectureship range
£5,940—£6,642 (Bar)—£7,578

Further particulars and application forms may be obtained from The Deputy Director, Crewe & Alsager College of Higher Education, Alsager, Stoke-on-Trent, ST7 2HL, to whom they should be returned by 23rd February. Requests for application forms will not be acknowledged unless accompanied by a stamped addressed envelope.

EAST HAM COLLEGE OF TECHNOLOGY

High Street South, London, E6 4ER
Principal: K. R. BISHOP, B.Sc.(Econ.), FRGA

SENIOR LECTURER
ADULT EDUCATION

Applications are invited from those with extensive experience in the field of Adult Education for this new post to be created on the 1st May, 1976.

Salary: £5,931-£6,956 plus £251 p.a. London Allowance.
Application forms and further details may be obtained by writing to the College Administrative Officer enclosing a self-addressed envelope.

Completed forms should be returned within 14 days of the appearance of this advertisement.

LONDON BOROUGH OF NEWHAM
Cleveland Technical College
REDCAR, CLEVELAND

Applications are invited for the following posts, duties to commence as soon as possible.

LECTURER ONE/CARPENTRY AND JOINERY to teach technology, associated subjects and workshop practice. The successful candidate should possess an Advanced Craft Certificate in C. & J. with preferably PTG in Carpentry, together with appropriate industrial experience.

LECTURER ONE/ENGLISH LANGUAGE AND PHYSICAL EDUCATION to teach English Language to students in GCE 'O' level courses, and Physical Education for students following full-time technical courses and adult recreational classes. Candidates should possess appropriate qualifications and experience.

LECTURER ONE/SECRETARIAL SUBJECTS to teach shorthand, Typewriting, Office Practice and Office Machinery to full-time and part-time secretarial students. Candidates should possess appropriate qualifications and experience.

Technical teacher training is desirable for all the above posts. Application forms and further particulars are available by applying in writing only to the Principal, Cleveland Technical College, Cleveland Road, Redcar, Cleveland, TS10 1EX, to whom completed application forms should be returned within 14 days of the appearance of this advertisement.

Financial assistance with household removals is available in approved cases.

Bulmershe College of Higher Education
COMMUNITY AND YOUTH WORK
Two Year Certificate Course
TWO ADDITIONAL TUTOR (Lecturer II)

Required for September, 1976
Applicants should have appropriate academic and professional qualifications: preferably a degree in Social Science and a C.Q.S.W. Candidates should also be prepared to support and develop a student-centred curriculum.

Further particulars and application forms may be obtained from the Academic Registrar (L5), Bulmershe College of Higher Education, Bulmershe Court, Woodlands Avenue, Easing, Reading, RG6 1HY. Tel: Reading (0734) 883387. Completed forms should be returned by Monday, 16th February, 1976.

HIGHBURY TECHNICAL COLLEGE
PORTSMOUTH
Hampshire Education Committee

Senior Lecturer in Business Studies

To be responsible for professional, ONC and, possibly, HNC courses. Applicants should be suitably qualified and experienced.

Salary: £5,031 to £6,956 p.a.
Application forms from The Secretary, Highbury Technical College, Cotham, Portsmouth, PO6 2BA. (Cotham 53131, ext. 247).

COLLEGES OF FURTHER EDUCATION
continued

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County of Cleveland
EDUCATION DEPARTMENT
YOUTH
TUTOR
(Burnham Scale III)
Applications are invited for the above post as Billing:



WIRRAL

YOUTH LEADER

£3,771-£4,248

For Bebington Youth Centre, modern and well-equipped with a trained and experienced team of part-time paid staff. The Centre is ripe for development for a person with initiative.

and Community Workers. The persons appointed will be chiefly responsible for developing Youth Community work at :—

FOR AN ATTRACTIVE COUNTRY

The Bletchley Youth Centre
is a well-established club, housed in purpose built premises, with excellent indoor sports provision. Seats for this post is £3,664.24, 128 p.a.

The York House Youth Club
is at Stony Stratford. It is a voluntary club and is a modern, recently modernised and adapted for work. Salary scale for this post is £2,246.23, 88 p.a. Removal expenses of up to £150 payable in 12 instalments and assistance with housing may be provided.

Application forms and further details from the Civilian Officer, Res. Jb., Civilian, 11, Wellesby, MK20 1UJ, or from the applicants to be returned to the Civilian Officer, Res. Jb., Civilian, 11, Wellesby, MK20 1UJ, on the appearance of this advertisement.

ATTRACTIVE COUNTY

We need 2 experienced Youth Workers to take charge of development at 2 Youth Centres in Buckinghamshire. Centres are attractively situated, offering good facilities and very good potential. At present the centres cater for the 14-21 age group; but emphasis is now towards the 16-plus group.

The Bleitchley Youth Centre

is a well-established club, housing in purpose-built premises, and adjacent to a sports provision, seats for this post is £3,000-£4,120 p.a.

The York House Youth Club

is at Stony Stratford, it is a voluntary club in a 6,000 sq. ft. mansion, recently refurbished and adapted for this post is £2,420-£3,960 p.a.

Removal expenses of up to £150 payable in 3 instalments and assistance with housing may be possible.

Application forms and further details from the Civil Service Commission, 100, Whitehall, London, SW1A 2BQ, or the Civil Service Call Centre, 020 7733 3000, will be returned to you on receipt of the appearance of this advertisement.

the 1990s, the number of people in the United States who are 65 years of age or older is projected to increase from 20 million to 30 million, and the number of people 75 years of age or older is projected to increase from 10 million to 15 million (U.S. Census Bureau, 1996).

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